
OPTIMUM BUSINESS OUTCOMES USING A TOTAL QUALITY MANAGEMENT

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Abstract

TQM consists of continuous improvement activities involving everyone in the organization, managers and workers, in a totally integrated effort toward improving performance at every level. Empirical evidence exists to show that there is a strong link between the capacity of organizations to produce world-class quality and their ability to compete and grow.

Keywords: Total Quality Management, Human Resource Management

Introduction

Indian companies must be well equipped in order to compete more effectively in highly competitive global markets; hence it is of paramount importance that issues which lead to poor implementation of quality programs be addressed tenaciously to deliver optimum business outcomes. The development of a methodology to evaluate the strengths and weaknesses of the quality system in an organization could thus be a conduit to resolve weaknesses and to compete more effectively on the basis of customer value creation through quality enhancement.

Today, companies have to survive and grow in a business setting where competition continues to intensify due to forces unleashed by globalization, liberalization, emergence of new trading nations, and accelerating technological change. Goetsch and Davis (1997) point out those companies, which previously competed on a local, regional, or national level, have now to compete against companies from throughout the world. Needless to say, only organizations that can produce world-class quality can compete at this level.

Empirical evidence exists to show that there is a strong link between the capacity of organizations to produce world-class quality and their ability to compete and grow (Garvin, 1991; Wisner and Eakins, 1994; Zairi et al. 1994; Mohram et al. 1995; McAdam and Bannister, 2001). Garvin (1991) found a strong positive link between Total Quality Management (TQM) practices and organizational performance measured in terms of productivity, profitability, and customer satisfaction and employee relations. Wisner and Eakins (1994) in his study of the performance assessment of the US Baldrige Quality Award winners found that the organizations performed financially as well or even better than their competitors.

Zairi et al. (1994) through their examination of studies in Europe, the US and Japan have shown that there is a strong association between TQM practice and bottom-line results. These studies strongly suggest that TQM has a direct impact on financial results, only if its implementation is well directed and planned and also there must be strong commitment in sustaining continuous improvements which are focused on end-customer benefits.

Mohrman et al. (1995), based on their study of TQM practices in large US organizations, determined that TQM practices had a positive influence on performance improvement and financial outcomes. They also found that the core practices of TQM (improvement of processes, mechanisms for employees to become involved) showed a strong relationship to market share, work performance outcomes and employee outcomes in manufacturing organizations. Production-oriented practices in TQM such as work cells, statistical process control, and self-

inspection and JIT deliveries were found to be related positively to company performance, employee outcomes in manufacturing, return on equity, competitiveness and profitability. Collaboration with suppliers, which is a major component of TQM, was also found to have a positive relationship to total factor productivity in both service and manufacturing organizations.

In another study, McAdam and Bannister (2001) are of the view that organizations with TQM in place obtain their profits from customer satisfaction. Through a case study they also show that as the application of TQM process matures with time, all the business indicators show steady improvement.

Our knowledge on the impact of TQM elements on business performance is limited. This study contributes to the literature as to how the TQM elements directly and indirectly influence organization business performance by the inclusion of leadership, quality culture, information/knowledge/ communication.

Future Trends in TQM

Businesses which gained most from TQM had started with ISO 9000 and had focused on external and internal measures. These organizations also had full management commitment, high levels of employee participation and training. Vertical systems allow us to solve problems while horizontal systems accelerate the problem-solving process. Vertical systems should be drivers and horizontal systems should be driven.

Six Sigma is a data driven method for achieving near perfect quality. The greater the number of sigmas within a specification the fewer the number of defects will be there. Quality management has undergone significant transformation from Craftsmanship to scientific management followed by quality assurance and TQM. The quality assurance aspect has been steered by the ISO series from one of conformance (ISO 9000 series version 1987/1994) to business systems that have a customer focus and continual improvement component (ISO 9001:2008). TQM on the other hand started with statistical methods and progressed through using tools to improve business systems in the areas of customer focus, partnering, empowerment, education and training, communication, benchmarking, continuous improvement, organizational factors and TQM implementation, certification and quality awards. The statistical component has advanced from three sigma model to the six sigma model which advocates near perfect quality through further reducing defects.

Hypothesis

H₁: The mean of leadership, quality culture, improvement methods & human resource management are the same for all sizes of organizations.

H_{a1}: The mean of leadership, quality culture, improvement methods & human resource management are not the same for at least two sizes of organizations.

Research Methodology

This research is based on the survey method. A comprehensive survey was carried out with a preliminary mail out of 300 firms in the Vidharbha Region of Maharashtra, India to identify their critical quality problems. These firms were a combination of large, medium and small organizations.

The complete population was used up trying to get the companies participation as best as we can as this was a major limitation not only for this project but for other similar research.

The questionnaire was designed to obtain information on managers' views of leadership, quality culture, improvement methods & human resource management. Respondents contacted through mail, telephone & personal interviews.

Table no. 1.1 Survey of sample distribution

| | |
|--------------|------------|
| Small | 149 |
| Medium | 121 |
| Large | 30 |
| Total | 300 |

Table no. 1.2 Descriptive statistics of the categories

| Categories | Mean | Standard Error | Median | Mode | Standard Deviation |
|---------------------------|-------|----------------|--------|-------|--------------------|
| Leadership | 48.20 | 2.82 | 45.38 | 38.50 | 22.84 |
| Quality Culture | 46.79 | 2.95 | 48.17 | 57.76 | 23.86 |
| Improvement Methods | 27.78 | 2.20 | 28.45 | 38.62 | 16.04 |
| Human Resource Management | 36.35 | 2.54 | 35.87 | 35.79 | 18.69 |

Discussion

Leadership

The mean value is 48.20 close to the 50% mark of the score. The median is 45.38 which indicate that the middle data is below the 50% of the score. The most frequently occurring score is 38.50, the mode. Standard deviation is 22.84. Half of the companies surveyed have a score below 45.0 with regard to leadership, 25% had a score above 61.0 and 25% had a score below 35.00.

Quality Culture

The mean value is 46.79 lower than the 50% mark. The median is 48.17 indicating that the middle data point is close to the 50% mark. The mode is 57.76 which support the most frequently occurring score is approximately 7% above the 50% mark. The standard deviation is 23.86. The companies surveyed are above average for 50% of the companies with regard to quality culture. One fourth had a score below 29.0 and 25% had a score above 62.0.

Improvement Methods

The mean score is 27.78 which are quite low. The median 28.45 is close to the mean. The mode 38.62 is higher than the mean and median and is the most frequently occurring score. The standard deviation is 16.04. More than 75% of the companies surveyed were below average with regard to applying improvement methods. 75% had a score below 40, 25% had a score between 39 and 27, 25% had a score between 14 hence more than 25% could be categorized as poor with regard to applying improvement methods. Another 25% had a score between 39 and 85.

Human Resources Management

The mean is 36.35 and the median is close 35.87. The mode is lower than the mean 35.79. The standard deviation is 18.69. Nearly 75% of the companies surveyed were below average with

regard to human resource management, 50% had a score below 47, 25% had a score below 22 and 25% had a score above 48.

Conclusion

An assessment of the quality management capabilities of the industries in the Vidharbha region of Maharashtra, India was carried out using descriptive statistical analysis. The findings have led to the development of important guidelines for managers involved in the planning and management of quality. Leadership and support of top management is needed to get all the functions to work together, share information, and maintain a reliable and secure operating system. The impact of quality promotion on such industries may be different from that of manufacturing, especially in terms of business outcomes.

Quality culture has demonstrated to have a strong influence on improvement methods and indirect effects on human resources management. The results of the analysis reflect the importance of the pathways towards meeting business outcomes with the traditional TQM constructs, namely Leadership, Quality Culture, Human Resources Management, and Improvement Methods.

Managerial Perspective

Medium and small size organizations have a lot to gain from reapplying leadership, quality culture, and improvement methods practices used by the large organizations that were surveyed. Small size organizations can also benefit from the quality culture practices of large organizations.

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