

Conceptual Analysis of Total Quality Management in the Manufacturing Industry in India: An Analytical Study

Jitendra Singh Chauhan,
Asst. Professor, School of Management, Graphic Era Hill University,
Dehradun, Uttarakhand India 248002
DOI:10.48047/pne.2018.55.1.61

Abstract

In this abstract, Total Quality Management (TQM) in India's manufacturing sector is conceptually analyzed. TQM is a well-known methodology that emphasizes ongoing development, client happiness, and organizational excellence. TQM is essential for boosting competitiveness and tackling the issues brought on by international markets in the context of Indian manufacturing. The main TQM components—leadership commitment, workforce engagement, process improvement, and customer centricity—are examined in this examination. It investigates how these components fit into the Indian manufacturing sector while taking into account regional cultural, economic, and regulatory concerns. The abstract also analyses how TQM implementation has affected several facets of the manufacturing sector, including customer loyalty, operational effectiveness, product quality, and supply chain management. It also emphasizes the difficulties that Indian manufacturers may have adopting TQM practices successfully. This paper contributes to a better understanding of the function of TQM in promoting sustainable growth, quality improvement, and competitive advantage for Indian manufacturers by evaluating the conceptual framework of TQM and its application in the Indian manufacturing industry.

Keywords: TQM, Manufacturing industries, Business, Techniques, Practices, Product

Introduction:

The manufacturing sector is crucial for promoting economic growth and development in today's cutthroat global marketplace. Manufacturing businesses must aim for excellence in all facets of their operations, including product quality, efficiency, and customer happiness, to stay ahead of the competition and satisfy customers. Total Quality Management (TQM), a crucial management strategy that emphasizes continual improvement, customer centricity, and employee engagement to attain excellence in all organizational activities, stands out in this setting. Figure 1 shows the various dimensions of the TQM at glance.

The idea of total quality management was developed in the 1950s and rose to prominence in the 1980s and 1990s as a result of the Japanese companies' quality revolution. It is a thorough management philosophy that seeks to integrate quality principles throughout an organization's procedures and culture. TQM places a strong emphasis on involving every employee, from senior management to shop floor staff, in a coordinated effort to raise quality at every level of production. One of the main engines of India's economic growth, the manufacturing sector, has realized the value of TQM in achieving operational excellence and maintaining global competitiveness. Indian manufacturers have come to the realization that simply creating items is insufficient; they also need to make things of a high caliber that fulfill both customer and international requirements. In order to improve their competitiveness, boost customer happiness, and streamline their operations, Indian manufacturers are turning to TQM more and more.

Total Quality Management (TQM), a crucial management strategy that emphasizes continual improvement, customer centricity, and employee engagement to attain excellence.

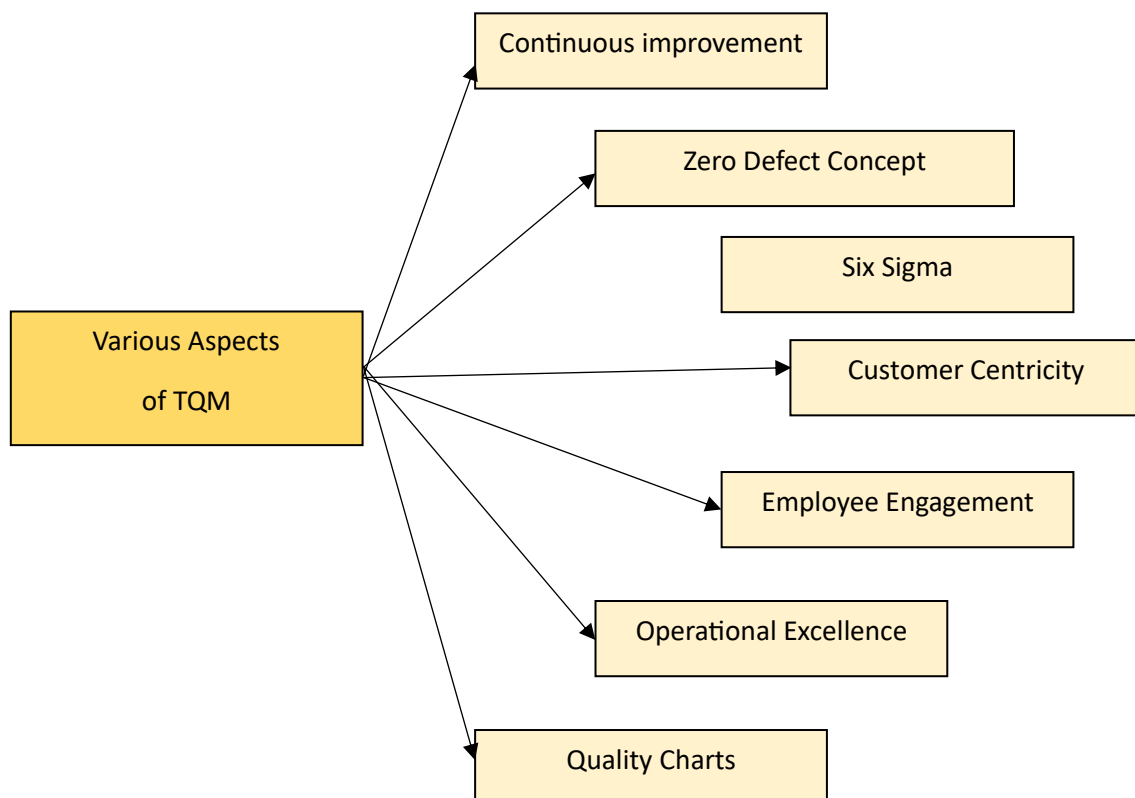


Figure 1 Various Dimensions of TQM

An emphasis on customer happiness is one of TQM's main tenets. Indian producers are aware of the need of providing customers with goods that not only meet but also surpass their expectations. Manufacturers in India can gain a thorough grasp of client wants and preferences by implementing TQM principles, such as stringent quality control, continuous improvement, and customer feedback channels. With the use of this knowledge, they may create and produce goods that are specifically catered to the needs of the market, increasing client happiness and loyalty.

One of the core principles of TQM is the emphasis on customer satisfaction. Indian manufacturers understand the need to deliver items to clients that not only meet but significantly exceed their expectations. By putting TQM principles, such as strict quality control, continuous improvement, and customer feedback channels, into practice, manufacturers in India can obtain a full understanding of customer desires and preferences. With the use of this information, they may design and produce products that are specially tailored to the demands of the market, thereby enhancing customer satisfaction and loyalty.

In India's manufacturing sector, the idea of total quality management has grown significantly in importance. TQM offers a thorough framework for Indian manufacturers to attain excellence in their operations in light of the growing emphasis on quality, customer satisfaction, and global competitiveness. Indian manufacturers may improve product quality, streamline operations, and establish a customer-centric culture that fosters long-term growth and success in the competitive industrial environment by implementing TQM principles and practices.

Literature Review:

Total Quality Management (TQM) is a strategy that uses ongoing process improvement to raise customer satisfaction, boost product and service quality, and lower costs. TQM has drawn a lot of attention recently in the context of the Indian manufacturing sector as a way to establish a competitive edge and increase customer satisfaction. The conceptual analysis of TQM in India's manufacturing sector has received a lot of scholarly and practical attention, according to a review of the literature on the topic.

It is essential to appreciate the historical evolution of TQM in order to comprehend the conceptual analysis of the Indian manufacturing sector. The foundation for the development of TQM was built by authors like **Juran (1988), Deming (1986), and Crosby (1979)**, who emphasized the significance of quality management principles and practices. **Jha et al.'s**

(1996) study of the application of TQM in two Indian manufacturing organizations is one of the early studies on TQM in the Indian manufacturing sector. The use of TQM, according to the authors, improved employee morale, financial performance, and customer satisfaction.

Another noteworthy study was conducted by **Prajogo and Sohal (2002)**, who looked at how TQM affected the performance of Indian manufacturing companies. The application of TQM, according to the authors, was linked favorably to enhancements in product quality, customer happiness, and financial performance. **Mittal and Sangwan (2006)** investigated the variables that affect the effective application of TQM in a study that was primarily focused on the Indian automobile sector. The authors discovered that key success factors for TQM implementation included communication, employee involvement, training, and leadership. Figure 2 shows the prerequisites of TQM.



Figure 2 Prerequisites of Total Quality Management

Similarly, to this, **Kumar and Antony (2008)** investigated how TQM techniques affected the performance of Indian manufacturing companies. The application of TQM, according to the authors, was linked favorably to enhancements in product quality, delivery, and customer happiness. **Ghosh and Mandal (2014)** examined the effect of TQM on the performance of small and medium-sized firms (SMEs) in India in a more recent study. The application of TQM, according to the authors, was linked favorably to enhancements in product quality, delivery, and customer satisfaction, as well as to greater employee involvement and cost savings.

In order to successfully adopt TQM, authors like **Singh et al. (2007)** and **Sharma and Kodali (2012)** emphasize the critical significance of leadership and management commitment. These studies emphasize that in order to establish a culture of quality within industrial organizations, top management support, involvement, and visible commitment are required. The importance of employee involvement and empowerment in TQM practices is shown by studies by **Bhuiyan and Alam (2005)** and **Singh and Kant (2010)**. For TQM projects to be more successful, they emphasize the importance of staff training, engagement, and appreciation.

The writings of **Kumar and Antony (2008)** and **Kannan et al. (2006)** provide insight into the value of fostering fruitful supplier and customer relationships in the Indian manufacturing industry. These studies place a strong emphasis on TQM's role in enhancing supplier performance, client happiness, and enduring relationships. Authors like **Rao (2011)** and **Rajendran and Anantharaman (2013)** talk about the difficulties in applying TQM in the Indian environment due to cultural considerations. They place emphasis on the need to address cultural obstacles like power imbalances, hierarchical systems, and opposition to change.

Studies by Sreedharan (2010) and **Subramaniam and Youndt (2005)** draw attention to the difficulties caused by management's and employees' lack of education and awareness. These studies emphasize the significance of education and training measures for developing a skilled workforce. Whereas, Authors like **Swami et al. (2008)** and **Antony et al. (2012)** show how implementing TQM improves quality, productivity, and operational performance in the Indian manufacturing sector. The fundamental TQM practices and ideas, as well as their applicability in the Indian manufacturing sector, have been examined by a number of authors. For successful TQM implementation in India, **Mohanty and Deshmukh (1994)** address the significance of customer focus, employee involvement, and continual improvement. Similar insights on the crucial success aspects of TQM, such as top management commitment, employee empowerment, and supplier involvement, are offered by **Prajogo and Sohal (2001)**.

Conclusion:

Total Quality Management (TQM) has a considerable impact and great room for development, according to the conceptual analysis of TQM in India's manufacturing sector. Through a combination of continuous improvement, staff engagement, and customer satisfaction, TQM has become recognized as a comprehensive strategy for achieving excellence. India's manufacturing sector has seen a noticeable transition as a result of the application of TQM

principles. Organizations have improved product quality, decreased defects, minimized waste, and streamlined processes by implementing TQM. Increased consumer happiness, enhanced market competitiveness, and higher profitability are the results of these advancements. However, there are several difficulties in successfully implementing TQM in India's manufacturing sector. Some of the obstacles that must be overcome include a lack of knowledge and comprehension of TQM principles, reluctance to change, and inadequate training and education. The extensive and varied nature of the Indian manufacturing sector needs particular TQM approaches and solutions. Manufacturing companies need to cultivate a culture of quality, encourage employee involvement, and spend money on training and development programs if they want to fully realize the potential of TQM. TQM adoption and efficacy can also be increased through government backing, industry stakeholder cooperation, and the use of digital technology. Overall, the conceptual study emphasizes how important TQM is to India's industrial sector. Organizations may achieve operational excellence, exceed customer expectations, and survive in a globally competitive market by embracing TQM principles and solving the accompanying obstacles.

References:

- Besterfield, D. H., Besterfield-Michna, C., Besterfield, G. H., Besterfield-Sacre, M., Urdhwareshe, H., & Urdhwareshe, R. (1995). *Total Quality Management Revised Edition: For Anna University, 3/e*. Pearson Education India.
- Goetsch, D. L., & Davis, S. B. (2000). Quality management. *Introduction to Total Quality Management for Production, Processing, and Services*.
- Sila, I., & Ebrahimpour, M. (2002). An investigation of the total quality management survey based research published between 1989 and 2000: A literature review. *International Journal of Quality & Reliability Management*, 19(7), 902-970.
- Dahlgaard, J. J., Khanji, G. K., & Kristensen, K. (2008). *Fundamentals of total quality management*. Routledge.
- Shahin, A., & Dabestani, R. (2011). A feasibility study of the implementation of total quality management based on soft factor. *Journal of industrial engineering and management*, 4(2), 258-280.
- Saraph, J. V., Benson, P. G., & Schroeder, R. G. (1989). An instrument for measuring the critical factors of quality management. *Decision sciences*, 20(4), 810-829.

- Chang, H. H., Wang, Y. H., & Yang, W. Y. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total quality management*, 20(4), 423-443.
- Corbett, C. J., & Klassen, R. D. (2006). Extending the horizons: environmental excellence as key to improving operations. *Manufacturing & Service Operations Management*, 8(1), 5-22.
- Robinson, C. J., & Malhotra, M. K. (2005). Defining the concept of supply chain quality management and its relevance to academic and industrial practice. *International journal of production economics*, 96(3), 315-337.
- Kim, D. Y., Kumar, V., & Kumar, U. (2012). Relationship between quality management practices and innovation. *Journal of operations management*, 30(4), 295-315.
- Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. *Journal of manufacturing technology management*, 17(6), 829-847.
- Walton, M. (1988). *The Deming Management Method: The Bestselling Classic for Quality Management!*. Penguin.
- Sigler, T. H., & Pearson, C. M. (2000). Creating an empowering culture: examining the relationship between organizational culture and perceptions of empowerment. *Journal of quality management*, 5(1), 27-52.