VIVA Institute of Technology 10th National Conference on Role of Engineers in Nation Building – 2022 (NCRENB-2022)



A Review paper on implementation of Total Quality Management

Aditi Pimpale

¹(Department of Mechanical Engineering, VIVA Institute of Technology, University of Mumbai, India)

Abstract : Today's modern era, Total Quality Management is a participative, systematic approach to planning and implementing a constant organizational improvement process. It's a continuous effort by management to upgrade and improve the processes and systems to ensure superior quality products. The principles of TQM are Produce quality work the first time, Focus on the customer, have a strategic approach to improvement, improve continuously, Encourage mutual respect and teamwork. Nowadays, Total Quality Management is also used within the e-business sector and it perceives quality management entirely from the point of view of the customer. Total quality management process is a modern system in the field of quality and the implementation of quality in construction sites. The objective of TQM is doing right things that saves the organization time that is needed to correct failed product of the company and service implementations. Their search aim to enhance rate of relationship between TQM executions towards rate of empowering.

Keywords - Continuous improvement, Customer satisfaction, empowerment job satisfaction, leadership, Total Quality Management

I. INTRODUCTION

Today's TQM is one of the business expressions in management and having scientific value and cooperation of staffs and manager of that company. Implementation of TQM becomes a top management agenda in many manufacturing companies that deal with. Today, quality improvement is an essential manner that is notified primarily as an essence in industry manufacturing. Other word total integration is being noticed and it will follow up common responsibility between mangers and staffs to respond to good quality. TQM is a management system- a philosophy, set of tools, and organizational models. It is known by names other than Total Quality Management, including: The Deming Management Method; in the United States Total Quality Improvement and Total Quality Commitment; in Japan- Total Quality Control, Company- Wide Quality Control, and kaizen, which in Japanese means gradual, unending improvement, doing little things better, setting and achieving ever higher standards. Total quality management process is a modern system in the field of quality and the implementation of quality in construction sites. Total quality management includes Juan, Deming and Crosby techniques as well as ISO standard.

II. TQM BASIC CONCEPTS

TQM is a way of Planning, organizing and understanding each activity that depends on each individual at each level. The philosophy of TQM is one of prevention rather than defect detection. The main problem of TQM is till today not widely implemented in the construction industry in India. Some large construction company are using TQM and implementing. TQM has been adopted by a good number of large-scale industries for the achieve their goal and mission of the company. Small and medium scale construction industry play an important role in the economic growth of the country and the mind of the growing population. The implementation of QM in an organization requires two distinct types of decisions: what to do (content: the extent to which the different QM practices should be used) and how to do it. We review the literature concerning these two aspects of QM implementation and discuss them jointly at the end.

VIVA Institute of Technology

10th National Conference on Role of Engineers in Nation Building – 2022 (NCRENB-2022)

1. Continuous Improvement of Quality. Fundamental to all TQM systems is improving the quality of the products and services provided by an organization. Such quality improvement results in greater productivity and enhances the ability of an organization to remain vital, employ people, and serve customers. A focus on continuous quality improvement helps an organization do things right.

2. Central Focus on the Customer. Also central to all TQM is a focus on the customer, the internal and external recipients of an organization's products. Their needs and desires define quality for the producer whose job it is to meet or exceed the customer's needs and expectations. A focus on customers helps an organization to do the right things.

3. Systematic Improvement of Operation. All work occurs in processes that begin and end somewhere. These work processes account for 80- 85 percent of the quality of work and productivity of employees. Management is responsible for systems within an organization; therefore, managers, not employees, must shoulder blame when something goes wrong with the system.

4. Open Work Environments. Continuous quality improvement requires an atmosphere for innovation where suggestions for improvement are solicited and respected and where supervisors and managers are open to disagreement, conflict, and challenge. Activities for the improvement of work processes, especially when teams are involved, help to break down barriers that occur between departments or between supervisors and those supervised.

5. Long- Term Thinking. TQM is also characterized by long- term thinking which helps mold the future by understanding the consequences of current actions. Such thinking requires decision making that is based on data, both hard and soft, and related to real problems, not symptoms. It requires time. It shies away from quick fixes arrived at by discussion and intuition. Long- term thinking works best in organizations where managers plan to stay, and thus have a stake in the consequences of their decisions.

III. REVIEW METHODOLOGY

The medium and large size companies, however, implement TQM they didn't use them properly because of Lack of knowledge about TQM. Study and search literature review from authentic journals and conferences from the online library database IUL, Lucknow, science direct on related to the implementation of TQM. Implementation of total quality management and various other relevant sources. The web search is done by using many journals like "implementation of TQM in the construction industry", "A Study on Challenges In implementing TQM in construction firms", "Needs of TQM in construction industry", "Applying TQM in construction industry", "Implementation Of TQM For Improving Organizational Effectiveness" etc

VIVA Institute of Technology 10th National Conference on Role of Engineers in Nation Building – 2022 (NCRENB-2022)

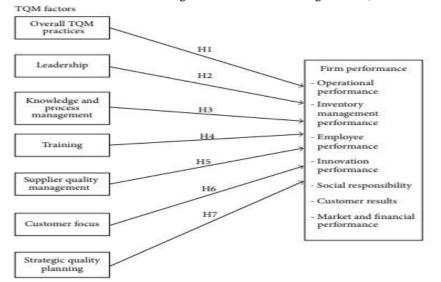


FIGURE 1: The proposed research model of the relationship between TQM practices and performance measures.

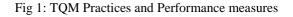




Fig 2: Tqm

IV. CONCLUSION

TQM program was characterized by customer focus, full participation, process improvement and process management and planning. TQM implementation process was a very long-term procedure. Empowerment of staffs, in the research, is resulted from TQM making. The manufacturing industry is using TQM & implementing TQM to get the satisfactory result. Construction being different from manufacturing and other industries, has many unique problems that cause hindrances in the adoption of TQM. The adoption of TQM by construction companies will result in higher customer satisfaction, better quality product and higher market share and stakeholder's satisfaction.

VIVA Institute of Technology

10th National Conference on Role of Engineers in Nation Building – 2022 (NCRENB-2022)

REFERENCES

Journal Papers:

- G Marcel T. ngambi, "The Impact of Total Quality Management on Firms Organizational Performance" American Journa Of Management Vol. 15, No.4, pp. 69-85, 2015.
- [2] AncaMadar, "Implementation of Total Quality Management Case Study" Transilvania University of Brasov Economic Sciences Vol.

8, No.1, pp. 125-132, 2015.

[3] Golden, S. A. R., and Regi, S. B., "Satisfaction of customers towards user Friendly Technological Services offered by Public and Private Sector bank at Palayamkottai, Tirunelveli District", International Journal of Research, 2(3), 2015, pp. 775-787.

[4] Osama Q. Abdulla, "Impact of Total Quality Management on Managing and Reducing Total Cycle Time in Manufacturing Projects", International Journal of All Research Education and Scientific Methods (IJARESM) ISSN: 2455-6211, Volume 2,

Issue 11, pp.1-5 , 2014.

[5] MaziyarNouraee, "Study Relationship between TQM on Empowerment and Job Satisfaction, World Academy of Science", Engineering

and Technology International Journal of Economics and Management Engineering Vol:7, No:9, pp.2638-2640, 2013.

[6] SyamsulBahri, "Implementation of Total Quality Management and Its Effects on organizational Performance of Manufacturing Industries, Through Organizational Culture in South Sulawesi, Indonesia, Journal of Business and Management", Vol 5, pp. 10-24,

2012.