IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT FOR ORGANIZATIONAL EFFECTIVENESS

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ABSTRACT

This paper presents a study on the relationship between implementing Total Quality Management (TQM) and organizational effectiveness. Quality can be defined as an attribute which differentiates a product or service from its competitors. In a dynamic business environment, organizations growth depends on the delivery of the high quality products and satisfying customers. Organizations worldwide are focusing on the ways to improve business practices to gain competitive edge. TQM directs the organizations to modify existing applications and to concentrate on providing solutions by redesigning existing business problems. The aim of this paper is to understand the significance of total quality management philosophy. The study intends to integrate TQM implementation with a broader perspective for achieving business excellence through customer satisfaction. An empirical study is performed to prove how manufacturing companies are more successful in implementing TQM in terms of higher degree of innovation.

Keywords: Quality, Total Quality Management (TQM), Business Excellence and Customer Satisfaction.

INTRODUCTION

Customers might have had experienced poor quality services when dealing with business organizations. To instantiate, these experiences may vary from an airline service that may have lost passengers luggage or a purchased product that is either damaged or broken, etc. The experience of poor quality is exacerbated when employees of the company either are not empowered to correct quality inadequacies or do not seem willing to do so. This may result in the companies to lose their valuable customers and their trust, goodwill and loyalty. The consequences of such an attitude may give rise to opportunities for competitors to take advantage of the market need.

Quality is the key factor which is identified for success of any organization. Total Quality Management (TQM) is an approach for improving the effectiveness and flexibilities of business as a whole. TQM is an essential requirement to improve overall effectiveness of each and every unit associated with business operations including all the stakeholders of the organization. TQM ensures the management to adopt a strategic overview for achieving its intended quality and devise methods to prevent major problems that compromises quality through periodical inspections. TQM is an integrated organizational approach to satisfy the customers in meeting their expectations on a continuous improvement through feedback and responding on time in addressing their queries and problems related to the products or services offered by the organization.

Optimization, that is to deliver highest value at lowest cost is the main objective of TQM. Implementation of TQM mainly consists of the set of processes which includes analyzing data on the basis of customer feedback, rectifying the problem by providing customer support and to maintain the goodwill, trust and loyalty of the customer by understanding their changing needs. Activities of TQM may also be extended to understand the nature and behavior of competitors' customers. Developing a proper systematic understanding of customer needs helps organizations to predict behavior of their future customer.To manage the day-to-day activities and to achieve future goals, efforts will be made to make the customers adaptable to the quality perspective and to perceive their changing needs by influencing the knowledge of the customer by providing necessary information is the main and primary goal of any organization following the principles of TQM.

TQM Model

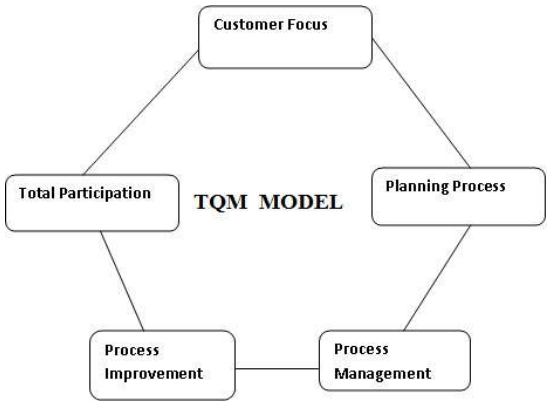

Figure 1

Figure 1 illustrates the TQM model and its implementation. The elements include customer focus, planning process, process management, and process improvement. TQM sees the end customer as the sole measure of quality to achieve organizational success. Any effort, including employee training, infrastructure upgrades, software investments, or product releases, is worthwhile only if it benefits customers. The firm should cater to the needs of market and make timely adjustments in accordance with the customer's needs and wants. A customer information system should be established to ensure their changing tastes and preferences. Strategic Planning is a process an organization uses to prioritize and focus on efforts of the company in implementation of a plan. An organization uses strategic planning to predict and anticipate changes in business environment so that it can be ready with alternative ideas which may develop an edge in market place that differentiates the organization that follows TQM practices from its competitors. It is important for the firm to formulate improvement plans that should be aligned with firm's resources to create a congenial work atmosphere. Conditions such as organization structure, employee attitude to change, overall business performance should be taken into account in making such an improvement plan. The key element, however, is the total participation of all the stake holders that yield synergistic benefits. An agile approach by top management to make their employees understand the goals of the organization and to carry out the business operations by training their employees, recognizing the capabilities of the employees and to make sure that they accomplish the objectives with their active participation and involvement.

Six C's of TQM

TQM process is to get the assigned task completed at the right time with quality improvement. The six C's for successful implementation of TQM process are as follows:

1) Commitment of Employees:
The core element in TQM Model is the commitment of employees. It must be driven by a strong desire to improve the quality of business. Employees who are committed to their organizational goals generally feel a connection with their organization.

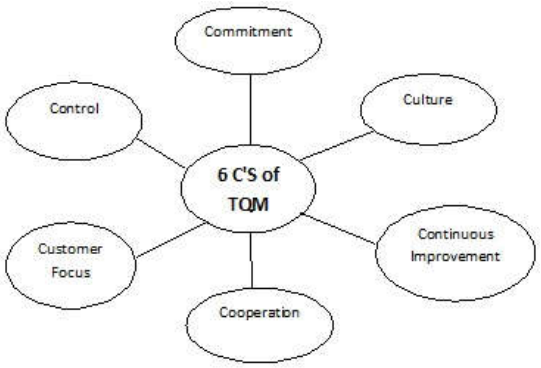

Figure 2

Furthermore, this will not only ensure a quality improvement, but also show proven results in commitment from all the employees for the work deployed to them.

2) Quality Improvement Culture:
There shall be a quality improvement culture in the organization. Training on regular basis is very essential for bringing a change in the organization culture and the attitudes of employees. Traditional culture and approaches needs to be modernized on a continuous basis in accordance with employees' feedback. This will ensure employees comfort towards effective administration of allotted work.

3) Continuous Improvement:
Total quality management is a continuous process which requires constant improvement in all related policies procedures and strategies laid by the top management in the company. Learning is continuous and never ending process. Based on skill set and proficiency of employees, an organization can achieve improved results that lead to organizational success.

4) Cooperation from Employees:
The application of Total Employee Involvement (TEI) principles is paramount in achieving the objectives of the organization. On-the-job experience of all employees must be fully utilized in order to develop improved organizational strategies and to enhance performance of employees.

5) Focus on Customer Requirements:
In order to maintain long term sustainability in the business, organization must focus on the changing requirements of the customers. In today's market, customers require and expect goods and services with zero defects.

6) Control:
There must be effective control for monitoring and measuring the real performance of the business. Documentation, procedures and awareness of best practices are essential, in order to implement principles of TQM appropriately. The control aids in rectifying the deficiencies, if any, in the business processes.

LITERATURE REVIEW

Total Quality Management (TQM) has become a driving force in many organizations in the business world today. For a company to remain competitive, quality is a priority. A strong commitment towards quality, and customer retention are essential for a business to compete with its competitors. Total Quality Management (TQM) is an organizational approach for customer satisfaction involving all the stakeholders in the continuous improvement of business strategies and processes. Experts opined that retaining the existing customers and attracting new customers is the main motto for long term sustainability in the market. They defined quality perspective in varied ways but everyone agreed that customer satisfaction is the only key to attain business excellence and organizational success. Philip Crosby defined quality is to conformance to specifications. On the other hand, Joseph Juran said quality is fitness to use. According to Edward Deming quality is defined by satisfaction of customers.

Total Quality Management is integration of all functions and processes of a business not only to build high quality products and services but also to gain customer satisfaction. Total Quality Management is defined as continuous effort by management as well as employees of a particular organization to ensure long term customer loyalty and customer satisfaction.

Suggested theories by experts
Many experts have helped to formalize different viewpoints in quality management. The tools and techniques of Total Quality Management based on various theories to improve the business processes which concentrates on quality are as follows:

Theory Name	Theory Principles
Edward Deming	System of profound knowledge Deming's 14 points to Total Quality Management The Plan-Do-Check-Act(PDCA) Cycle
Joseph Juran	Quality Planning Quality Control Quality Improvement
Philip Crosby	Define quality as a compatibility to requirements Produce quality by prevention The performance standard of quality is zero defects Measuring the quality by the price of non conformance.

Total Quality Management Tools

1) **Pareto Principle:** Pareto principle suggests cause-effect relationship that most effects arise due to relatively few causes. In quantitative terms, 80% of the problems occur from 20% of the causes viz., machines, raw materials, operators etc. For instance 80%of the wealth owned by 20% of the people. Therefore, efforts must be made aiming at 20% causes to solve 80% of the problems.

2) Control Charts: Control charts also called as Shewhart chart a statistical representation which is useful in determining whether an industrial process is within control or not and capable to meet the customer defined specification limits. The main purpose of is to ascertain if the process is stable and capable within current conditions. It helps in differentiating common causes from special cause of variation.

3)

4) **Force Field Analysis:** This tool draws one to depict the forces (policies, culture etc.,) that are resisting a desired change and the forces that support the change. This assists an organization to clearly determine the degree of difficulty of making change and exactly where effort will be needed.

5) **Fishbone Diagram (Ishakawa Diagram):** Fishbone diagram was developed by Dr. Kaoru Ishikawa. This tool is also called as cause and effect diagram. It is used in a brainstorming session to examine factors that may influence a given situation or outcome. The causes are often grouped into categories such as people, material, method or process, and equipment. The resulting diagram takes the shape of a fishbone. Then, most likely causes of the problems are identified to carry out further analysis.

6) **The plan-Do-Check-ACT (PDCA) Cycle:** This tool is also known as the Shewart cycle, Deming cycle. The plan-do-check-act is a repetitive four step model for carrying out change. It is implemented to improve the quality and effectiveness of processes by proper planning and implementing it by effective measurement of all the processes. The cycle is repeated as needed.

7) **Brainstorming:** The concept is to invite participants to suggest solutions to a problem without any evaluation of the usefulness or correctness of their ideas. Several approaches are possible, including open suggestions, rotating suggestions, or blind suggestions. After all suggestions have been recorded, there will be a discussion on the "value" of the suggestions made.

8) **Affinity Diagram:** It is a tool used to organize large amounts of non-quantitative information (ideas, opinions, issues etc.,) into groupings based on natural relationships between the items. It is largely a creative process rather than a logical process. In simple terms, the affinity diagram does for ideas what statistics does for numbers, viz., extract meaning from raw data.

Key Factors In Implementation of TQM at various organizations:

ORGANIZATION	KEYFACTORS TO TQM IMPLEMENTATION
Motorola	Produce products and services to six sigma standards. Reduce total cycle time. Provide a creative, cooperative Workplace. Renewal of Leadership.
General Motors	Eliminate the practice of competing internally. Promotes team work. Developed a system called "quality network". Developed quality councils at corporate, division and plant levels.
Ford motors	Quality defined by customer. Quality excellence can be best achieved by preventing problem rather than be detecting and correcting them after they occur.
Texas instruments	Customer related measures. Reduce cycle time. Functional text results. Cost of conformance. Cost of non conformance. Total cost of quality.

Toyota motors	Concept of customer first. Launched creative idea suggestion system. Strives to eliminate waste to overproduction. .
Xerox	Focused on bench marking. Leadership teams. Reduced its supplier's base.

TQM Implementation

Implementing TQM is major task and it is an organization-wide intervention. Total quality management (TQM) is a systematic quality improvement approach for firm-wide management for the purpose of improving performance in terms of quality, productivity, customer satisfaction, and profitability. TQM must be approached in a pragmatic and well- through fashion. Sink's suggestions for design, development and implementation of total quality management are as follows:
Stage 0: Understanding the organization system.
Stage1: Developing a strategic plan for the TQM effort.
Stage2: Planning Assumptions.
Stage3: Specifying Strategic Objectives.
Stage4: Specifying Tactical Objectives.
Stage5: Implementation Planning.
Stage6: Project Management.
Stage7: Measurement and Evaluation.
Stage8: Evaluation, Accountability, Follow up, ensuring Effective Implementation.

The challenge for any business today is to produce quality products or to provide service efficiently. Quality is one of the key objectives in operation management along with cost, flexibility and delivery of goods and services.

Organization Performance

A firm is likely to reduce its costs by carrying out quality control, inspection, assurance and also to emplace a strong leadership. Commitment of top management is mandatory for the creation of quality management environment. Management must lead the implementation process within the organization and clearly communicate with key members of the organization. Meaningful involvement of employees requires employee empowerment, which creates a work environment where people have the ability, the confidence, and the commitment to take the responsibility and ownership to improve the process and initiate necessary steps to satisfy customer requirements within well-defined boundaries in order to achieve organizational values and goals. All members involved in the TQM implementation process must receive training in communication skills, quality awareness (TQM in particular), and specific problem solving techniques such as statistical quality control, safety, and technical aspects of the job. It is necessary to involve front line employees in decision making at their workplace as they are the ultimate actors for producing quality products.

TQM has evolved as a philosophy that emphasizes the need to provide customers with highly valued products and to do so, improvements in efficiency by eliminating waste, reducing lead times at all stages of production process, reducing cost, developing people must be made continuously. At the end of the twentieth century, the quality revolution in Japan has spread to the other parts of the world. It involved an entirely new way of thinking and dealing with quality that encompasses the entire organization. People call Total Quality Management differently in different organization like for instance "Six Sigma" at Motorola, "Leadership through quality "at Xerox, "Perfect design quality" at Intel and "Total Quality Control" at Hewlett-Packard.

CONCLUSION

Quality improvement and cycle time reduction are no longer fads or slogans but have become the survival issues of the 21st century. Companies that have adopted quality management practices have experienced an overall improvement in corporate performance including better employee relations, higher productivity, greater customer satisfaction, increased market share, and improved profitability. Besides, each company developed its practices in a unique way with its own opportunities and problems. The practices included common features in their quality management systems with corporate focus on meeting customer needs, the congenial work environment to focus on business processes, the empowerment of employees to seek continuous process improvement, a flexible and responsive corporate culture.

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About Author

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