

KAIZEN PHILOSOPHY AND TOTAL QUALITY MANAGEMENT (TQM)

Nimmi Maria Oommen

Assistant Professor of Education,
Titus II Teachers College, Tiruvalla, Kerala

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Abstract

In the decade of 1980, management techniques focusing on employee involvement, and empowerment through teamwork approach and interactive communications and on improving job design were not new, but Japanese companies seemed to implement such techniques much more effectively than others. The business lesson of the 1980's was that Japanese firms, in their quest for global competitiveness, demonstrated a greater commitment to the philosophy of continuous improvement than Western companies did. For such a philosophy the Japanese used the term Kaizen. This conceptual paper is an educational analysis of Kaizen philosophy and its connection with Total Quality Management (TQM)

Keywords: *Kaizen, quality, management, people, process*

Kaizen means improvement, continuous improvement involving everyone in the organization from top management, to managers then to supervisors, and to workers. In Japan, the concept of Kaizen is so deeply engrained in the minds of both managers and workers that they often do not even realize they are thinking Kaizen as a customer-driven strategy for improvement. This philosophy assumes according Imai that "our way of life – be it our working life, our social life or our home life – deserves to be constantly improved.

The essence of Kaizen is that the people that perform a certain task are the most knowledgeable about that task; consequently, by involving them and showing confidence in their capabilities, ownership of the process is raised to its highest level). In addition, the team effort encourages innovation and change and, by involving all layers of employees, the imaginary organizational walls disappear to make room for productive improvements. From such a perspective, Kaizen is not only an approach to manufacturing competitiveness but also everybody's business, because its premise is based on the concept that every person has an interest in improvement. The premise of a Kaizen workshop is to make people's jobs easier by taking them apart, studying them, and making improvements. The message is extended to everyone in the organization, and thus everyone is a contributor. So, when Kaizen for every individual could be an attitude for continuous improvement

The three pillars According to M. Imai, a guru in these management philosophies and practices, the three pillars of kaizen are summarized as follows: Housekeeping; Waste Elimination; Standardization

He stresses that the management and employees must work together to fulfill the requirements for each category. To be ensured success on activities on those three pillars three factors have also to be taken account.

Visual Management, The role of the supervisor, The importance of training and creating a learning organization.

Housekeeping: This is a process of managing the work place, known as "Gemba" (workplace) in Japanese, for improvement purposes. Imai introduced the word "Gemba", which means "real place", where value is added to the products or services

before passing them to next process where they are formed (16). For proper housekeeping a valuable tool or methodology is used, the 5S methodology. The term “Five S” is derived from the first letters of Japanese words referred to five practices leading to a clean and manageable work area: seiri (organization), seiton (tidiness), seiso (purity), seiketsu (cleanliness), and shitsuke (discipline). The English words equivalent of the 5S's are sort, straighten, sweep, sanitize, and sustain. 5S evaluations provide measurable insight into the orderliness of a work area and there are checklists for manufacturing and nonmanufacturing areas that cover an array of criteria as i.e. cleanliness, safety, and ergonomics. Five S evaluation contributes to how employees feel about product, company, and their selves and today it has become essential for any company, engaged in manufacturing, to practice the 5S's in order to be recognized as a manufacturer of world-class status.

Waste (Muda) Elimination: Muda in Japanese means waste. The resources at each process — people and machines — either add value or do not add value and therefore, any non-value adding activity is classified as muda in Japan. Work is a series of value-adding activities, from raw materials, ending to a final product. Muda is any non-value-added task.

In Kaizen philosophy, the aim is to eliminate the seven types of waste (7 deadly wastes) caused by overproduction, waiting, transportation, unnecessary stock, over processing, motion, and a defective part.

Overproduction – Production more than production schedule; Inventory – Too much material ahead of process hides problems; Defects – Material and labor are wasted; capacity is lost at bottleneck; Motion – Walking to get parts because of space taken by high WIP; Processing – Protecting parts for transport to another process; Waiting – Poor balance of work; operator attention time; Transportation – Long moves; re-stacking; pick up/put down

Standardization

Standards are set by management, but they must be able to change when the environment changes. Companies can achieve dramatic improvement as reviewing the standards periodically, collecting and analysing data on defects, and encouraging teams to conduct problem-solving activities. Once the standards are in place and are being followed then if there are deviations, the workers know that there is a problem. Then employees will review the standards and either correct the deviation or advise management on changing and improving the standard. It is a never-ending process and is better explained and presented by the **PDCA cycle (plan-do-check-act)**, known as Demming cycle.

Kaizen and Total Quality Management (TQM)

TQM is a journey, a movement centered on the improvement of managerial performance at all levels. It deals with:

Quality Assurance; Employee Involvement; Cost reduction; Safety; Continuous Improvement; Productivity improvement

Moreover, TQM journey deals with management concerns such as organizational development, cross-functional management, and quality deployment. In other words, management has been using TQM as a concept and a tool for improving overall performance. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach focused on

continuous process improvement. The activities are ultimately focused on increased customer-user satisfaction. The importance of people in the total process is emphasized on TQM journey. Considerations such as culture, incentives, teamwork, training, and work involvement are typical. The optimum effectiveness of TQM results from an appropriate mix of the social and technical systems. It is common practice to emphasize the technical aspects of improvements, such as machine or computer-related, with less emphasis on people and their roles in the process. Improving quality and productivity to achieve competitiveness emphasizes the need for an enterprise to capture the potential inherent in the workforce by enabling each employee to do his or her job right the first time. This requires that top management to demonstrate to all employees that it is personally committed and continuously pursuing efforts to improve quality. The organization must provide an environment in which all employees will voluntarily cooperate to achieve the organizational objectives. This requires that management accept the idea that employees can and want to contribute. Management thus flows down ideas and goals and encourages the flow of ideas upward. The TQM philosophy provides a comprehensive way to improve quality by examining the way work gets done from a systematic, integrated, consistent, organization-wide perspective.

On TQM journey the focus is to: Emphasize continuous improvement of processes (kaizen), not compliance to standards, Involve all functional units, not just the Quality Control/Assurance function, Motivate and involve employees to become the driving force behind improvement, Satisfy the internal and external customers, Understand the effects of variation on processes and their implications for process improvement.

Significance

The Kaizen philosophy, defined as a style of continuous business improvement made in small increments, originated in Japan. The idea focuses on improving processes and products while using employee creativity to help define the way procedures and systems can be improved. Two of the overall advantages of the philosophy include increased productivity and maintaining quality of products and services.

Criticism

Many people just don't believe such radical changes can be made in such short amounts of time, with many Kaizen events creating substantial improvements within just a week's time.

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Online resources

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