

# [Construction industry in implementation of tqm management essay](https://assignbuster.com/construction-industry-in-implementation-of-tqm-management-essay/)

Nowadays most of the organisations in a worldwide industry are more towards on implementing Total Quality Management in their system in achieving and maintaining the title of world class industry. However there are still some of challenges, barriers and issues faced by these industries in succeeding the implementation of TQM. From Ngai and Cheng [2] paperwork, they have list nine factors that prevent an industry for implementing Total Quality Management.

It is known that implementing TQM is the most challenging tasks for any organisation. It is important for an industry to understand, recognize and eliminate these factors before an industry can obtain the best performance in implementing Total Quality Management. In this section, we will discuss the main challenges, barriers and issues faced by the construction industry that prevent the implementation of TQM efficiently.

From Peter Hoonakker and Pascale Carayon paperwork [3], they have listed four of challenges, barriers and issues faces by the construction industry. The major barrier to the successful implementation of the management system seems to be the nature of the construction process [3]. The project that is being conducted in construction industry often involved with large projects and the labor intensive seldom located in the same location. There is also report that the workforce in the construction industry tends to be transient where in the same time the demand seem to be fluctuated from time to time. The second barrier faced by the construction industry in implementing TQM is too many parties involved along the construction process which lead to protecting of their own interests in a matter. Although the major goals of the project is shared, but the participants involved with the project will have different ways in gaining profit from the construction process thus will lead to challenges in implementing Total Quality Management in the construction industry. The third barrier is non-standardization in the construction process where products are one off and production process have little different from each other [3]. This will lead to poor of quality assurance where no universal standard can be referred. In construction industry, the details of the design process also frequently being changed where no standardization has been applied and often it will affect the quality of a product and process because when the plan is changed, it will definitely gave a great impact on quality itself. Last but not least is the culture of the employees itself on the construction industry need to be change in leading successfully implementation of Total Quality Management.

In paperwork by Mark McCollough and Mike Benson [4], they have identified top five from 60 barriers in implementing Total Quality Management in construction industry. The barriers are such as lack of trained workers, competitive markets, poor plans and specifications, bad attitudes and lack of competent field managers. It is identified that most of the construction workers lack of training as result becoming the main barriers in implementation of TQM. Suitable training is needed in order to train the workers in producing employees that know how to complete and conduct their job. As day goes on, competitive in construction industry has increase in the last of 25 years which the number of contractors also increase from year to year. The need to maintain quality at minimally acceptable level is crucial in order to make sure the companies does not spend to high cost in order to get good quality of product and process. Poor plan and specification also has been listed as the challenges in implementation of TQM in construction industries where many of the project owners do not understand the impact on failed planning stage where it could lead to a project that costs more and longer time to complete [4]. The popular barrier that always occurred in construction industries is the bad attitudes among the employees in teams. As we know that TQM works on identifying and solving problems in a team. Attitudes such do not care or do not take cognizance of other employees job will become one of the barrier in successful implementation of TQM where it emphasize on continuous improvements among the employees.

To compare with paperwork done by Gul Polat [5], the main challenges, barriers and issues faced at construction industry in implementing TQM are almost the same as other paperwork regarding implementation of Total Quality Management in construction industry. Table 2. 1 below listed the challenges, barriers, and issues faced by construction industry in implementation of Total Quality Management [5]:

Table 2. 1: Challenges, barriers, and issues faced by construction industry in implementation of Total Quality Management

Challenges, Barriers and Issues faced

Average Score

Lack of top management commitment

3. 19

Lack of top management support

3. 13

Lack of top management leadership

3. 06

Difficulties in mapping processes and developing standardized procedures

2. 85

Difficulties in taking corrective and preventive actions

2. 79

Difficulties in employing statistical quality control techniques in construction process

2. 72

Lack of workforce qualified in quality management implementations

2. 7

Lack of effective teams / team building skills

2. 67

Difficulties in including quality measures, continuously monitoring and controlling construction processes

2. 61

Need for employing skilled workforce

2. 58

Difficulties in developing quality information systems in construction process

2. 52

Difficulties in quantifying cost of poor quality

2. 42

Increases in paperwork

2. 41

Difficulties in finding workers, who can claim to be experts in both construction and quality

2. 36

Need for conducting continuous training programs for employees

2. 33

Difficulties in quantifying cost of quality

2. 32

High cost of developing and utilizing a quality management system

2. 05

Incompatibility of standardized quality management systems with the construction industry

1. 91

Scale 0-4: 0 = unimportant, 1 = slightly important, 2 = important, 3 = very important, 4 = critical

CONTENT 3: How your team may help to design solutions using elements which are stated below for the TQM Implementation?

Continuous Improvement through training

One of the solutions in successful implementation of Total Quality Management is with involving the construction industry employees through training in gaining continuous improvement among them. Continuous improvement can be define as the process of identifying, analysing and giving a solutions to problems that involve with testing, implementing and learning process. With suitable training provided by the employer, the skills on know-how in completing and doing their job will increase from time to time. By the training provided, the employees also might have a deeper understanding on their daily jobs which lead to successful implementation of Total Quality Management in the construction or any industries. So, why we need continuous improvement? This is because for proactive reasons and reactive reasons. Proactive reason are necessary for our own vision for the future improvement and how we will be competitive in the coming time while reactive reason focus more on the customers and the company itself. Training will provide standardization of processes and work where when an employee do not how to the job, they will tend to ask others and as the result some of the solutions given will not provide standardization to the work or process and this will lead to unsuccessful implementation of Total Quality Management to an industry. For TQM to be successful, construction industry must give commitment in training employees at all levels of hierarchy. The TQM that should be provided are good when at comprehensive training, including technical expertise, communication skills, small-team management, problem-solving tools and customer focus. Training also will provide a company to challenge their employees and avoid them from being in stagnant position and some of the capabilities and abilities of the employees could be seen and enhance from the training provided. Thus one of the solutions in solving the barriers to implementation of Total Quality Management is by providing continuous improvement through training.

Organizational Change

The second solutions elements for TQM implementation is by change the organizational structure of an industry. Organizational change can be defined as the framework in managing the new effect of business process, organizational changes of structure and cultural changes within an industry. In order to change the organization, ones must understand what types of change are needed and necessary, how to make them happen and how to manage them accordingly. Basically there are four types of organizational change that is strategic, cultural, structural change, and technological change. The need of organizational change is to change the cultural of employees in an organization hence lead to continuous improvement in implementing Total Quality Management process where change in term of new behaviors and skills can be obtained from the organizational change process. The objectives of cultural change is to have more open communications between employees and departments, empowerment, prevention which mean doing right at the first time, focusing on customer and solving problems at their roots. The most common method that is cultural change that is necessitated by TQM where employees must be clear of what they are paying attention to. They must also react accordingly to critical things that are happening in the industry or company. Below are some strategies that could help implementation of successful organization change [6]:

In ensuring the vision of the business change, strong leadership is needed to communicate with the employees effectively

Training and strategy in educating employees about what and how do their daily work will change from the organizational change process

A strong plan in measuring whether the change is a success and plans to follow up for both successful and unsuccessful results.

Providing rewards can encourage an employees or groups to have more confident level in managing their new roles and responsibilities

Empowerment

Empowerment can be defines as giving the authority to a certain peoples or groups to make decisions based on what they feel is right when it comes and promotes change without getting the permissions from upper management. By having the empowerment for employees, it can help an organization or industries implement the TQM more effectively. By having this empowerment, it enables employees to do more on the thinking process rather than waiting for top management people to solve it. With fast problem solving, it will lead to successful implementation of TQM where the basic principles of it is involvement of every employees to improve the quality and in the same time it reduces time in providing the solution to a problem. By having responsible employees in an organization, it is the main key to the quality itself. By giving the autonomy in decision making, it will lead to more responsible employees but the management must recognize and choose suitable employees to let them have the empowerment or else it could be worst. Empowerment of employees also gives more time to upper management focusing and engaging with visioning, nurturing, broad-based thinking and focusing on quality [7]. The strategies to implement this empowerment method can be practice through setting up challenging task to the chosen employees to train them. Providing reward system or opportunities for carrier advancement that involve employee’s autonomy in a certain task might encourage the employees to be more interested and responsible in the organization. Last but not least, the implantation of employees empowerment could lead to friendly and happy employees and can cater to the customers’ needs easily with thinking process. In conclusion, empowerment is one of the good methods in providing the good platform for implementation of Total Quality Management.

[2] Ngai E, Cheng T (1997) Identifying potential barriers to total quality management using principle component analysis and correspondence analysis, International Journal of Quality and Reliability Management, Vol. 14, No. 4, Pp. 390-409.

[3] Peter Hoonakker, Pascale Carayon (2010) Barriers and benefits of quality management in the construction industry: An empirical study, Total Quality Management Vol. 21, No. 9, September 2010, 953-969.

[4] Mark McCollough and Mike Benson, Five barriers to TQM in constuction, “ To make your company more competitive, remove these common obstacles to Total Quality Management (TQM).

[5] Gul Polat, “ Barriers and Benefits of Total Quality Management In The Construction Industry: Evidence From Turkish Contractors,” 7th Research/Expert Conference with International Participations “ QUALITY 2011”, Neum, B&H, June 01 – 04, 2011

[6] http://searchcio. techtarget. com/definition/organizational-change-management-OCM

[8] http://empowermentleadstoquality. blogspot. com/