

Quality management and solutions to improve its quality in construction industry

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Abstract

Nowadays implementation of quality management systems is discussed as a necessity to guarantee the survival of organizations. Also, quality management in Projects is placed as one of the most important knowledge fields of project management. Given the low quality of construction sector and wasting national wealth and the low-life buildings, it will be necessary to discuss about quality management and its necessity in this paper. In this paper moreover the introduction of quality management, its necessity and Kaizen management, factors of quality degradation and presentation of promotion strategies in the construction industry were addressed. Then, by presenting quality levels in the construction industry, the introduction of lean thinking to improve the quality and productivity was studied and at the end, the current situation in terms of quality of construction companies were examined. Also, suggestions are offered for completion and studies continuation.

Keywords: Quality Management, Construction Industry, Lean Thinking.

1. Introduction

Quality has always been urgent an all dimensions of human life. But in workplace because of growing acceleration of development of new technics and also customization of production and services, organizations more and more are looking forward to identity manner of quality control in correspond to customer's demand. Quality is one of the recent controversies in the production and service field. Whereas its history traced back to many years ago but, its modern concept was presented in the 20th century.

W. Edwards Deming [1]- he taught statistical quality control to Japanese and always mentioned that management must have an understanding of deviations. He insisted that system change is on responsibility of managers and they must recognize deviations in systems with the help of graphical control. Today's management considers DR. Deming as "the father of quality management".

Philip B. Crosby [1]- he is an active person. Opinions of whom about quality management attracted great attentions. Crosby's "four absolutes" of quality and his plan for total management played a main role in basis of quality. The following are four absolutes:

- ❖ The definition of quality is conformance to requirements (requirements meaning both the product and the customer's requirements).
- ❖ The system of quality is prevention.
- ❖ The performance standard is zero_defects (relative to requirements).
- ❖ The measurement of quality is the price of nonconformance.

Joseph M. Juran [1]- as like as Deming he became famous because of his suggestion to Japanese. His emphasize was mostly on costumer. Another point of his view is that companies must reduce quality costs. It is utterly different from Deming's view that disregards quality costs. Juran defined quality as "suitable to use".

In recent years, quality of construction convert into a big problem in Iran. In many cases due to the weak observation, construction without technical specifications is needed whereas nowadays, these technical specifications are used to reduce final cost of building in all over the world.

2. Necessity of quality management