

Chapter one: Introduction

1.1 Background

Total Quality Management (TQM) has received attention worldwide and is being adopted in many industries, especially in the manufacturing industry. One of the main principles of the TQM concept is to achieve customer satisfaction and this is an important objective for any organization, including engineering and construction organizations. However, the implementation of TQM differs from one industry to another. The construction industry differs from manufacturing industry in a way that makes introducing TQM more challenging. The construction industry is unique in the following factors (Ashford, 1989): (1) mobility of labor, (2) diversity in the types, forms and shapes of construction projects, (3) geographical dispersion, (4) contractual relationships, and (5) susceptibility to weather.

The reason for this challenge as reported by Strange and Vaughan (1993), is the point of view that construction leaders have about the industry. The construction leaders believe in what can be called the five "can'ts." These are 1) you can't apply industrial management solutions to construction, because of the unique nature of the construction industry. 2) You can't do statistical analysis of construction processes, because they are unique and non-repetitive. 3) You can't invest in training at the job level, because individual employment is short-term, the people have no company loyalty and the environment is too difficult. 4) You can't spend money on management programs, because there is too much competition and the margins won't allow it, and 5) You can't take time away from doing the work for seminars, retreats or symposia. However, several approaches

have been implemented to achieve quality in the construction industry. These approaches are characterized by differences in emphasis.

This document reports on research activities carried out by the author during his sabbatical leave (October 1996 to June 1997). The objective was to investigate TQM implementation in Saudi Aramco's Engineering and Project Management Administrative Areas (Eng. and PMT Admin)

1.2 Study Objectives

The main objectives of the study were:

- to study the implementation stages of TQM and how they are critical in the overall success of TQM implementation;
- to study the obstacles associated with TQM implementation.

1.3 Limitations

The study was limited to the investigation of TQM implementation and obstacles in Saudi Aramco's Engineering and Project Management Administrative Areas), Dhahran.

1.4 Report overview

The report contains five chapters and appendices. The first chapter contains background, study objectives, and limitations. The second chapter is the literature review. The third chapter describes the methodology. The fourth chapter discusses the case study, which includes the implementation and the obstacles. The fifth chapter includes the summary and conclusion.