

# Quality Management System and Customer Satisfaction in Construction Companies

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**Abstract-** This research is to obtain a general opinion concerning the implementation of quality management systems (QMS) of construction firms in Coimbatore and to determine whether construction firms have successfully satisfied the customers.

Descriptive Research design is administered in the study. Questionnaires were prepared and given to the construction employees and customers to identify how those companies are implementing quality management system and successfully satisfying the customers. Systematic random sampling is adopted for data collection. From the observation of collected responses from employees and customers of construction companies, adopting quality management principles by the company can contribute a huge customer satisfaction to them. Also it may lead to the improvement of performance of a construction company to sustain in current construction market

**Key words-** Quality management system; Construction employees and customers; Systematic random sampling

## I. INTRODUCTION:

Quality in construction projects as well as project success can be regarded as fulfilment of customer's expectations. Quality is one of the main criteria which decide the success of construction project. Quality has been adopted in construction industry mainly because as in any other industry, it is critical that client satisfaction is achieved if an organization is to succeed, or indeed survive. In this connection this study mainly discusses the quality management system adopted and customer satisfaction achieved in construction companies. Quality management system provides a basic quality structure to a company for which the participant's expectation is to be achieved. Customer satisfaction is the degree of satisfaction provided by the company which is measured by the means of number of repeat customers of the company. Customer satisfaction is the measure of how happy the customers feel when they do a business with a company.

## II. AIM AND OBJECTIVES OF THE PAPER:

The main aim of the paper is to examine how the level of implementation of quality management system by the construction companies in Coimbatore creates an impact in customer satisfaction. The objectives can be summarised as follows:

1. To examine the implementation of quality management system by the construction companies in Coimbatore.
2. To find out the customer satisfaction achieved by those construction companies in Coimbatore.

## III. RESEARCH METHODOLOGY:

The project methodology is framed in such a way that implementation of quality management principles by the company influences the satisfaction to the customers. Following are the works involved in project methodology

- a) Collected articles on quality management System and customer Satisfaction.
- b) Studied a general idea concerning the implementation of quality management system by the construction companies.
- c) Added suitable quality management factors in the preparation of questionnaire to achieve customer satisfaction as a result in the study.
- d) Collected and gathered data needed for performing the research. For example list of construction companies in Coimbatore with its address and distance from Gandhipuram.
- e) Prepared a separate sample design for construction companies.
- f) Prepared the questionnaire for the companies for asking questions based on ISO 9000 quality management principles and total quality management elements undertaken by the company employees.
- g) Similarly prepared the questionnaire for the customers who are utilizing the buildings constructed by those construction companies.
- h) Converted the two questionnaires to the local language to get the responses easily from construction employees and construction customers.
- i) Given questionnaires to the construction employees and customers by visiting them directly and received responses.
- j) Appropriate Statistical Tools will be applied for fruitful analysis and Interpretation of data. Those statistical tools will be used like ANOVAs Table, chi-square test, factor analysis, Multiple Regression and Structural Equation Method.

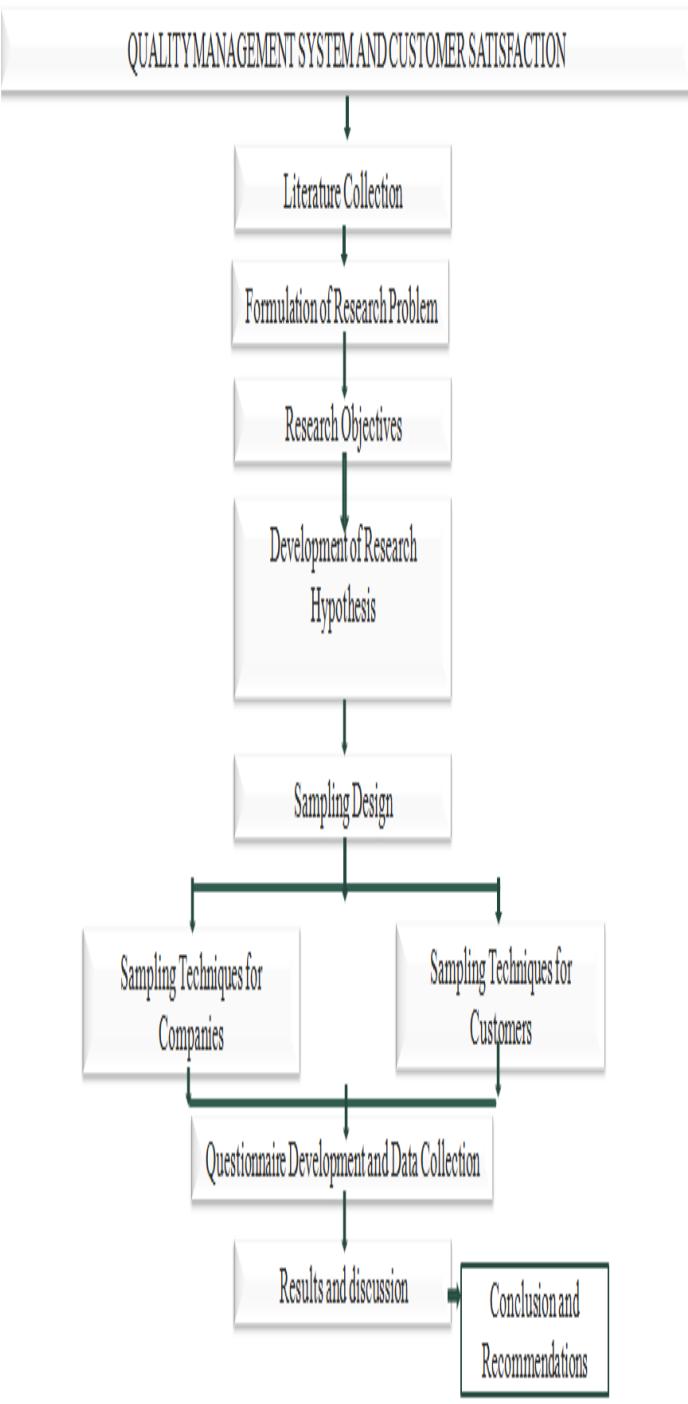


Fig -1: Research Methodology

#### IV. DESIGN OF QUESTIONNAIRE:

To receive the responses regarding the awareness and implementation of quality management system by the construction company's a questionnaire was prepared, and to find out the level of satisfaction of customers for the buildings constructed by those construction companies another questionnaire was prepared. Totally two number of questionnaire was prepared. One for construction company employees and another for construction company customers. For construction employee's, questionnaire has two parts. One part is based on questions regarding ISO 9000 quality

management principles which consist of eighteen numbers of questions. Second part is based on questions regarding total quality management elements which consist of twenty four numbers of questions. For construction customer's, questionnaire has totally twenty three numbers of questions which were asked based on the different factors of customer satisfaction in the construction process. Both the questionnaires were converted into local language to receive the direct responses easily from the respondents.

#### V. DATA COLLECTION:

Currently data were received from three company employees and customers by visiting them directly. Direct data collection was received. The summary of data collection was clearly shown in the below table

Company name	No of employee responses	No of customer responses	ISO 9000	TQM	Customer satisfaction
X	18	06	Good	Medium	completely Satisfied
Y	04	04	Low	Medium	Completely Satisfied
Z	14	02	Good	Medium	Partially Satisfied

#### VI. RESULTS AND DISCUSSION

From the observation of collected responses from employees and customers of construction companies, two companies which have scored a good and medium implementation of ISO 9000 quality management elements and total quality management elements have completely and partially satisfied the customers. But a company which have scored a low and medium implementation of ISO 9000 quality management elements and total quality management elements have successfully satisfied the customers. Hence the observation indicates that customer satisfaction not only depends upon the quality management system adopted by the company but it completely depends upon the company's commitment and priority towards quality for customers.

#### VII. CONCLUSION

The study was carried out to examine the quality management principles adopted by the construction companies and also to evaluate the customer satisfactions with reference to Coimbatore City. ISO 9000 Quality Management Principles and Total Quality Management elements are to be applied in various areas of an organization for the achievement of intended quality management objectives. Though the quality management system should be followed mandatorily by the construction companies to achieve quality, other factors such as communication process within the company, quality awareness, quality inspections and quality related workshops needs to be strengthened for the achieving quality at each and every stages of work.

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