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FACTOR AFFECTING QUALITY MANAGEMENT IN CONSTRUCTION INDUSTRY

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Abstract: The need for achieving quality of the finished product in the building construction is very important. Quality is an essential element for sustainability and customer satisfaction. Quality in its simplest form can be defined as meeting the customer expectations or compliance with customer specification. Construction industry plays an important role in the development of any country. The development of construction industry depends on the quality of construction projects. Quality is one of the critical factors in the success of construction projects. Improvement in the quality of construction projects is linked with quality management in the project life cycle. Although quality management at every stage of project life cycle is important but the quality management at the execution (construction) stage contributes significantly on final quality outcome of construction projects. Certain factors are more critical to a projects success than others. These factors are called critical project success factors. This project mainly focuses the importance and factors that affects the quality management in the execution (construction) phase.

Keywords: Quality, project life cycle, quality management, factors affecting

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INTRODUCTION

Construction industry plays an important role in the development of any country. The development of construction industry depends on the quality of construction projects. Quality of design, material used and workmanship, affects the future operating, maintenance and rehabilitation costs of infrastructure. Quality is one of the critical factors in the success of construction projects. To be competitive in today's market, it is essential for construction companies to provide more consistent quality and value to their owners/customers. From the perspective of a construction company, quality management in construction projects should mean maintaining the quality of construction works at the required standard so as to obtain customers satisfaction that would bring long term competitiveness and business survival for the companies. Quality management at every stage of project life cycle is important but the quality management at the construction stage contributes significantly on final quality outcome of construction projects. Certain factors are more critical to a projects success than others. These factors are called critical project success factors. In this paper the factors affecting the quality performance of construction projects is studied.

2. IMPORTANCE OF STUDY

Quality of construction projects is linked with proper quality management in all the phases of project life cycle. Design and construction are the two important phases of project life cycle which affect the quality outcome of construction projects significantly. In a NEDO (National Economic Development Office), London survey aimed at improving methods of quality control for building works it was found that "design" and "poor workmanship in the construction process" combined to form more than 90% of the total failure events. Quality management at every stage of project life cycle is important but the quality management at the construction stage contributes significantly on final quality outcome of construction projects. Certain factors are more critical to a projects success than others. These factors are called critical project success factors. During the last decades construction industry has been heavily criticized for its performance and productivity in relation to other industries. With the turn of the new millennium, it appears that the construction industry is going through an intense period of introspection, which is exacerbated by increased technological and social change.

In this paper the factors affecting the quality performance of construction projects is studied. It can be used to measure performance in construction projects. This is a key component of any organization move towards achieving best practice in order to overcome the quality performance problem in the construction projects.

3. Aim and Objectives

The aim is to determine the factors affecting quality management of structures in construction industry.

Objective of project are:

Determine the major factors that will affect the quality of construction project particularly in execution phase.

4. METHODOLOGY

The methodology of the study was thorough literature reviews which were conducted to identify the factors that affect quality as recognized by researchers and practitioners in this field. About 45 literature papers were studied. The life-cycle phase of building projects were consists of construction phase. In construction phase the factors that affect quality were identified and studied. So questionnaires were designed and administered to the groups of respondents namely consultants and contractors. The surveys were conducted on various sites as to collect data for factors affecting the quality. And based on the collected data the following factors were identified which affect the quality

- Management factors
- Conformance to Codes and Standards
- Financial issue
- Selection of sub-contractor
- Material
- Labour
- Equipment
- Lack of communication
- Lack of training for staff
- High level of competition
- Planning and control technique

- Selection of designer
- Co-operation of parties
- Contract document
- Time factor
- Productivity
- Environmental factor

The following steps were carried out in this paper. These are as follows

- After title conformation relevant literatures were collected. From the literature the problem and issues were identified.
- Framing the questionnaires based on the analysis from literature review.
- Conduct the questionnaire survey on various sites.
- Find out the factors that affects the quality of construction.
- Conclusion.

5. CONCLUSION.

Quality is an essential element for sustainability and customer satisfaction. The need for achieving quality of the finished product in the building construction is very important. The high cost of buildings makes it necessary to ensure quality of the finished product. Quality is an essential element for sustainability and customer satisfaction. In construction projects, quality performance is considered as vital for client satisfaction. Finding out of these factors will help to improve the quality. Quality training and meetings that is necessary for performing an improvement.

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