

# COST CONTROL METHODS USED IN CONSTRUCTION PROJECTS

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**Abstract** - The cost control is a process that should be continued through the construction period to ensure that the cost of the project is kept within the agreed cost limits. The cost control can divide into major areas; the control of cost during design stages and the control of cost by the contractors once the constructions of project have started.

Cost control of project involves the measuring and collecting the cost record of a project and the work progress. It also involves the comparison of actual progress with planning. The main objective of cost control of a project is to gain the maximum profit within the designated period and satisfactory quality of work.

**Key Words:** ABC analysis, EOQ analysis and WBS.

## 1. INTRODUCTION

Due to the ever-increasing competition and current climate in the construction industry, this has lead construction companies to become more competitive in their projects. The aim of this research was to highlight the importance of proper minoring construction and examine what cost control process that is in place. This will help all staff realise the importance of monitoring constructions and cost control system by suggesting recommendations to implement in future projects.

Cost control is the process of comparing actual expenditures to the baseline cost plans to determine variances, evaluate possible alternatives, and take appropriate action. To effectively control costs, be sure cost plans are prepared with sufficient detail.

### 1.1 Methodology

A comprehensive review was under taken to get a better understanding of cost control system knowledge transfer. For the current research a case study was conducted on medium scale contractors by means of semi- structured interview and questionnaire to look at how their cost control system we monitored and any recommendation for improvement the research will illustrate the basic process used in cost control of construction project, in each process we explain the basic information need to this process and who is responsible to do this process and the form need to do the process (spreadsheets controls).

## 2. CHARACTERISTICS OF A PROJECT CONTROL SYSTEM

1. A focus on what is important- the control system must focus on project objectives the aim is to ensure that the project mission is achieved. To do that, control system should design with these questions in mind

What is important to organization?

What are we attempting to do?

Which aspects of the work are most important to track and control?

What are the critical points in the process at which controls should be placed?

2. A system for taking corrective action-

A control system should focus on response. If control data don't result in action, then the system is ineffective. That is a control system must use deviation data to initiate corrective action. Otherwise it is simply a monitoring system, not a control system.

3. An emphasis in timely response

The response to control data must be timely. if action occurs too late, it will be ineffective. This is frequently is a serious problem. Data on project data is sometimes delayed by four to six weeks, making it useless for taking corrective action. Ideally information on project status should be available on real time basis. In most cases that is not possible. For many projects weekly project status report is adequate. Ultimately, you want to find how many hours people actually work on your project and compare that figure to what was planned. This means you want accurate data. Some people may fill out weekly time reports without having kept track of their daily working times. Since most of us can't remember with any accuracy what we did a week ago. When people fill out time reports a week ago. When people fill out times. Reports each week without having written down what they did daily, they are writing fiction. Such made up data are almost worse than none at all.

### 2.1. PROCESS OF COST CONTROLLING

Process of cost controlling techniques of construction project.

- 1) Identification of cost influencing factor
- 2) Identification of mitigation strategies used at various location
- 3) Selection of site
- 4) Collection of all site data regarding to site
- 5) Questionnaires' with contractor and problem faced by him.
- 6) Techniques can be used for improvements.
- 7) Recommendations to the contractor.

### 3. OBJECTIVES OF MATERIALS MANAGEMENT

1. To minimize materials cost.
2. To procure and provide materials of desired quality when required, at the lowest possible overall cost of the concern.
3. To reduce investment tied in inventories for use in other productive purposes and to develop high inventory turnover ratios
4. To purchase, receive, transport (i.e., handle) and store materials efficiently and to reduce the related costs
5. To trace new sources of supply and to develop cordial relations with them in order to ensure continuous material supply at reasonable rates.
6. To cut down costs through Simplification, standardization, value analysis, import substitution, etc
7. To report changes in market conditions and other factors affecting the concern, to the concern.
8. To modify paper work procedure in order to minimize delays in procuring materials
9. To conduct studies in areas such as quality, consumption and cost of materials so as to minimize cost of production.

It describe the process between Procurement team and other department as shown in figure 3.1

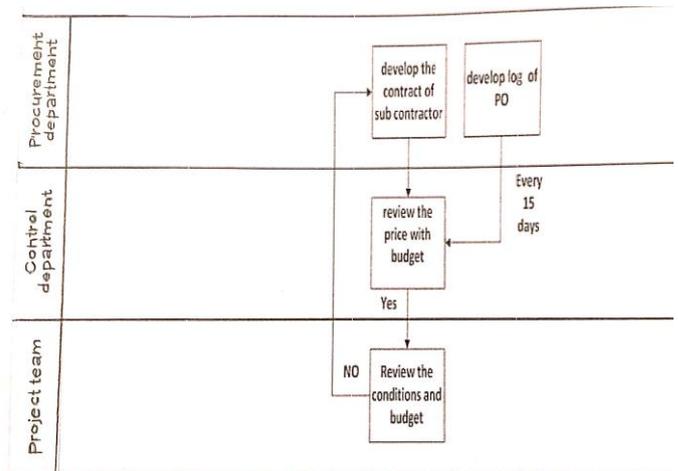


Fig. 3.1

It describe the process between storage team and other departments as shown in figure 3.2

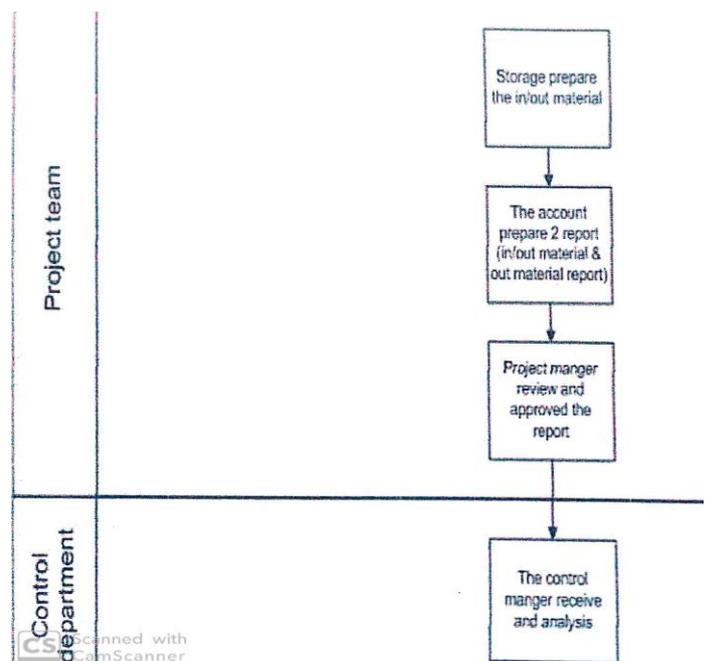


Fig. 3.2

It describe the process between project team and other department as shown in figure 3.3

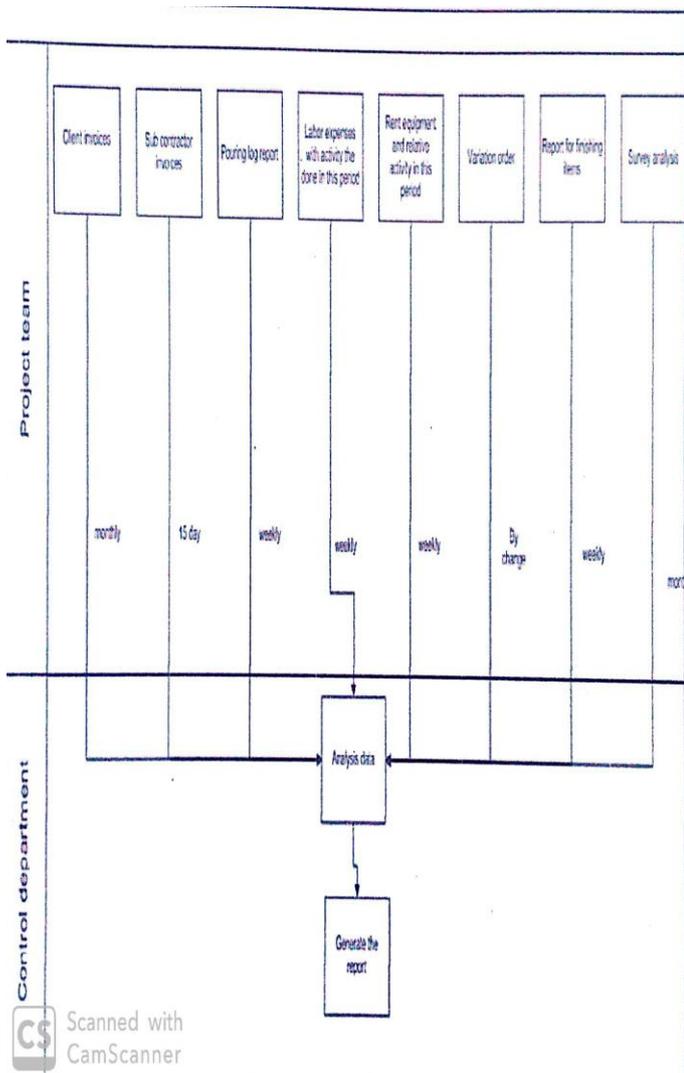


Fig. 3.3

#### 4. CONCLUSIONS

1. Poor budgeting practices, such as basing the estimates on vague information from similar projects rather than the detailed specifications of the project at hand.
2. Failure to plan sufficient contingency budget.
3. Failure to correctly estimate research and development activities.
4. Failure to consider the effects of inflation on the cost of materials or labor.
5. Receiving or analyzing status information too late to take corrective action.
6. Adirnat that does not support open and honest disclosure of information.

7. Indiscriminate use of the contingency budget by activities that overrun their budgeted cost.

8. Failure to re budget when flaws are discovered/ technical performance falls below performance standards, or changes in project scope are approved, During the course of the project.

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