

## ELEMENTS OF COST OVERRUNS AND DELAYS IN CONSTRUCTION PROJECT

Shahnewaj Haider<sup>1</sup>,Pinaki Prasanna Nayak<sup>2</sup>

<sup>1</sup>PG Student,Department of Civil Engineering, Sharda University

<sup>2</sup>Assistant Professor,Department of Civil Engineering, Sharda University

**Abstract-** *There have been many surveys and studies to determine the cause of the overrun of time and cost overrun in construction projects which lead to delay completion of the project time and cost are the lifeline of every project. It is of paramount importance to study, analyze and evaluate the common factors that lead to these restrictions and suggest the best mitigation measures to overcome constraints of time and cost overrun. During the construction phase is the primary responsibility of the project managers to monitor the costs and time and avoid both cost overruns and time. Because of these limitations, this document describes the real cost and time overrun control practices in the construction industry.*

**Keywords-** *cost overruns, Time overruns, project controlling, Construction, survey.*

### I. INTRODUCTION

The construction industry plays a big role in the development of country, society and the world. Construction industry makes our life to survive easily. Without construction we cannot amazing the world. All the construction has some parameters for project. The main parameters for the construction are time, schedule, and money. These things directly effect on the project in the ways like overruns of the project, delays in completion of the project as well as risk associated with that project. The construction industry is the way through which the goals of city and village development can be achieved. It has a great impact on the economy growth and financial growth of all over the world. The reasons for the cost overruns are faulty design; conflict between the client and the contractors, poor weather delays the project, shortage of materials will lead both overruns of cost and delays in completion of the project. Keeping construction projects within estimated costs and schedules requires good planning, good practices, and good monitoring.

The conflicts of owners, contractors and consultants, has led to delays and cost overruns in projects as initial time and cost estimates vary. Each and every project in the construction industry, the purpose of the project managers, and the project to control the time and cost of the other professionals and ensure that the projects expire on time without overrun at any time and within their cost (budget), any without cost overruns, with the right management principles, without deviation are in the project. This is a most complex work with enormous risk-time overrun and project deal without the costs overrun by project managers and subsidiaries. This paper focuses on the problems like unavailability of materials, excessive amendments of design and drawings, poor coordination among participants, ineffective monitoring and feedback, lack of project leadership skills.

### II. LITERATURE REVIEW

#### A. Causes of cost overruns

One such is delay in payments [1]. Slow payments or delay payments in construction industries are very common. Client does not give payments to the contractors or clients on time due which cost overruns[2].

#### B. Design Change during Construction Phase

There are many changes from the client e.g. Change in design, change in scope of work, change in specification. Many a times decisions are pending which cause delay in the project[3].

#### C. Contractor's financial stability

Contractor has to pay its own money at the initial phase of the project. So, it is very important that financial condition of the contractor should be stable. Many contractors have started many project at the same time due to which they have to face financial problem at the later which causes delays in the project.[2]

*D. Causes of delays in project*

When owners get involvement in any project that make the project delay, due to his lack of experience and knowledge regarding to that field and delay in supply of equipment [2, 4].

Decision making also delays the project. This mainly happens in government related project because the decision should be taken by higher authority, so their most is probable delays late decision due to which delays in project. Shortage of materials leads to both overruns of cost and delays in the project. The reasons behind is it the rate of materials varies according to the time, and to get materials at the time rainy season is very difficult for contractors and they have to face shortage of materials and leads to delays in the project [5-7].

### **III. REASERCH DESIGN AND METHODOLOGY**

The strategy followed in this research was first started with identifying issues that was made through unstructured literature, the study of archives and the informal discussions with colleagues and professionals in the sector; and then the research design were made. Then sources of data and information have been identified based on formulated research design. Research instruments were decided on the basis of data and information sources; and the available documentary sources relevant to research were reviewed. The review includes books, magazines, internet sources and other documents. After a thorough documentary review and engineering a list questionnaire than the various causes of cost overruns have been distributed to reputable contractors, construction clients and consultants for their professional opinion based on the experience.

*A. SOURCES OF DATA AND RESEARCH*

The research instrument used to identify and classify the causes of cost overrun and delays in this research was the questionnaire survey and personal interview. It has been used to provide the advice professionals and other relevant data by questionnaire and interview. In addition, a literature review to develop a conceptual basis for the study was also conducted. Through the review of the literature, possible causes leading to the cost overruns and delays, the effects of cost overruns and delays control methods and cost management have been identified. The review provided the basis to design the questionnaire which was distributed to professionals involved in the construction sector. Due to the large number of public bodies who have construction projects and the large number of contractor and consultation to companies who commit to work for public agencies a questionnaire survey was considered appropriate.

*B. QUESTIONNAIRES SURVEY*

The result of the questionnaire survey that was used to obtain the views of key stakeholders in the construction sector presents the results on the causes of the excess of costs on the basis of their opinion. The causes are classified and organized on the basis of the likelihood of occurrence, severity of impact and of global importance. The results of the questionnaires have been analysed.

Fluctuation in price materials, time delays, fraudulent practices, Additional work, Shortening of contract period, Storage of materials, financing and payment of complete good, Time delays, Inaccurate material take off, Increase in labor cost, Lack of experience of locations, Lack of experience project type, Monthly payment difficulties, contract management, Material procurement, Inflation, Contractors financial difficulties, Owners lack of experience, Weather, Poor project management assistance, Financial difficulties of owners, Design changes.

Financial limitation of contractor, Delayed payment to contractor, change in scope of the work, Disputes between the parties, Revision of design and drawing, Selecting in appropriate contractors, Fraudulent practices and corruption, Frequent equipment breakdown, Low productivity of labor.

### **IV. CONCLUSION**

The construction industry is one of the major contributors to the economic development of a country. The construction industry is mainly thanks to investments from the Government on the rural and urban infrastructure; Industrial capital investment by corporate sector activities and the development of the real estate/housing sector. The basic objective in the industry must achieve the completion of the project in the time and budget of planned spending. Study of literature has revealed that the cost overrun is a very common phenomenon, and it concerns projects a lot. Many studies point out that the situation is more serious in developing countries.

The main objectives of this study are to identify and analyze the causes of the construction cost overruns and delays. To achieve the objectives, the paper used office study and survey as finding aids. Clients, consultants and contractors had to identify and evaluate the causes of the cost overruns and delays. Respondents were asked about the likelihood of occurrence and the severity of the impact of the causes listed in the questionnaire.

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