

Construction Projects Are Difficult But Not Impossible To Manage

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Abstract: A construction project begins with an idea that is born due to a particular wish or need. Once the decision has been made by the owner to transform this idea into a reality, in a sense, the first phase of the project has begun. During this project initiation, the owner gives great consideration to the various parameters of the project, such as, what is actually needed, the work required, and how much financing may be obtained. The decision to build a fundamental backbone to the aim and criteria of the project is not one to be taken lightly, but by the end of this evaluation process the owner should have a clear, but very general vision of the impending project. After this period of analysis, if the project still proves beneficial, the owner may then decide to take the next step and hire design professionals to begin the 'design phase' of the project. Upon selection and evaluation procedure of design professionals, the owner has now become the client and the programming stage of the design phase may begin. During this process, the design professional's primary focus is to ascertain the needs and desires of the client. Programming also involves searching into which codes and regulations will be applicable to the specific project.

Key words: Construction project, Difficulties in construction project, construction project and management, project management, management in construction project.

1. Chapter One: Introduction

1.1 Background

As of now, the awareness of undertakings by administration extends progressively achieving all parts of mechanical movement, including construction. The construction introduces a specific arrangement of attributes. The nature of the production and development of the business sector itself, use the ideas and strategies brought by present day administration hypotheses are various troubles and ought to be adjusted to permit their implementation. Alzahrani, J. & Emsley, M. (2013) [1] Specifically the construction, faces numerous years stamped trouble, experiencing distinctive business sector emergencies, making the branch organizations confine interest in new advances, both in the execution and administration of their ventures. In any case, keeping in mind the end goal to overcome current interest of project enhancement. To meet the last construction industry prerequisite has looked to apply in their foundations new associated development advances and systems upheld by new administration. It is additionally clear that acknowledgment in the development business that the achievement of the project are subject to the initiative aptitudes of undertaking directors and their capacity to get the best from their groups.

1.2 Statement of the Problem

- Construction Projects are Difficult but Not Impossible to Manage

1.3 Research Questions

- How can be construction projects managed?

1.4 Significance of the Study

It is essential to understand the significance of the study as the concept, that construction projects are difficult to be executed. Therefore, it is significant to comprehend that they are difficult but not impossible to be managed. In this research, this topic will be emphasized in order to make the readers realize and analyse the possibilities of fulfilling construction projects effectively.

1.5 Definition of Key Terms

- **Construction:** It is a process of erecting an infrastructure on a larger perspective.
- **Technical Feasibility:** Easy to understand the complexities and technicalities.
- **Planning:** Process of creating a different techniques and methods to achieve certain objectives.
- **Project management:** A process in which the completion of a project is guided from beginning to end with the use of different techniques and strategies in order to maintain the aims and objectives towards the progress of a project.

1.6 Organization of the Dissertation

- **Chapter 1:** It will encapsulate the research question and objectives in order to initiate the dissertation.
- **Chapter 2:** This chapter will encapsulate the data collection through multiple secondary sources, in order to support the research work.
- **Chapter 3:** This chapter will cover the research methodology to be used in order to conduct the research work thoroughly.
- **Chapter 4:** This chapter will cover the discussion and analysis part to be done on the basis of extracted material from the secondary resources.
- **Chapter 5:** This chapter will eventually cover the conclusion and appropriate recommendations for the research along with the research topic.

2. Chapter Two: Literature Review

2.1 Conceptual Framework

The development segment or the construction segment has persevered its sustenance through critical development accomplishment around a decent rate of the GDP, because of the popularity as of late for this business sector. With the logically created rivalry amongst substantial and little business people, the planned division of these organizations began to give more noteworthy significance to arranging strategies, control of generation furthermore the nature of products and their respective services Clough,

R. (2003) [3]. The performances in the production control area has been demanding structural and behavioural changes in both production processes and the administrative and management procedures as a way of achieving solutions to streamline processes, improve quality and reduce the prices of products. It became then indispensable the total management of the resources used in a project, be it large or small, aiming to improve all processes. In this context, the construction sector has strived to adapt the concepts, methods and techniques developed for industrial production environments that are generally implemented through administrative procedures, as well as planning and production control systems. However according to Hardin, B. (2009) [7], these systems developed for the industrial environment cannot always adapt to situations occurring in the building, causing it to have to generate inappropriate and low inefficiency. Alzahrani, J. & Emsley, M. (2013) [1] But showing the bibliographies and data on this subject, it is that professionals in the tactical and operational levels of these companies do not have the same vision and therefore do not give the same importance to the subject. According to the analysis of different research reports it is observed that the professional management of building a solution that will meet the expectations in project design and execution of the work in various aspects such as: Technical feasibility of the project; manages the project, analysis of investment; Planning activities, etc. making the work a profitable and promising business. In accordance to the social perspective, this sector of the economy is one of the largest job creators in the country therefore deserves to be studied and researched to better efficiency to make small, medium and large businesses healthier and focused on your business. Ayyub, B. (2011) [2], explains that, rationale despite little experience on the construction industry, it is noted that there is a lack of training and information for professionals involved in project management. The objective of this research will adopt the tools of project management, management of construction company's projects seeking a better use of the basic features of the work and also understand the factors that lead the civil works are so insusceptible delay and conflict in the project. The motivation for this research is based on admiration for the subject and because he is relatively new in the construction sector. Project is a non-recurring development, characterized by a logical sequence of events, starting, middle and end that is designed to achieve a clear and defined goal, being driven by people within pre- defined parameters of time costs, resources, and quality. This research is necessary to enhance and level information between engineers and master builder who normally have difficulty in transmitting to their subordinates what should be done in the long and short term, especially when they order services are carried out verbally. Gould, F. & Joyce, N. (2009) [5] emphasized that, the second level of planning, the engineer of the work, possession of a macro schedule, reports verbally to his charge what should be done in a certain period of time, which usually is based on weeks. Standardizing planning and more focused to business, can improve and become more professional this practice with simple procedures, but that will require those involved a stance centred and faithful to these procedures. It is noticed that with these procedures may be possible to achieve a

better level in managing projects for construction companies. The main aspects that serve as an advantage as of managing a project can be highlighted as the

- Avoid surprises during execution;
- Develop competitive advantages;
- Anticipate unfavourable situations;
- Speed up decisions;
- Increase management control.

Along these lines, a danger examination needs to be created by the building originator brought about rubbing between the building planner and the temporary worker. Disappointment of the seal would be liable to bring about an unalterable breakdown. The planner should make up for any danger by including wide wellbeing edges in the details. For whatever length of time that the temporary worker regarded those edges, execution was considered safe. It can be done with an infusion spear that would convey fundamentally distinctive results if not infused precisely vertically into the ground. Therefore, contingency planning and precautions would enable he engineers to encounter any future damages or miss-happenings.

2.2 Search Strategy

To lead this particular research, the positivist and the interpretivist techniques were used in the most likely manner. Interpretivist is the perspective that relies on upon the judiciousness that the world and the fact of the matter are not external and they are basically confined by the all-inclusive community. This particular procedure is essentially related to the philosophy that is subjective after the inductive methods routinely. The central rule behind the positivism is that every one of the information that is based upon the truths is related to the positive information that is gathered from the various observations and the considerations that lie past the area of the way that could be indicated are the extraordinary. The announcements that could be considered as genuine ought to be the investigative articulations. Predominantly the optional strategy was utilized to gather the information that incorporated the utilization of the information base, intranet and the distinctive sites from where the applicable information was accessible. In reference to Levy, S. (2012) [8], this entire work was additionally encouraged by utilizing the distinctive exploration articles from the examination diaries and the diverse studies that were done on the points having the closeness with the examination subject.

2.3 Literature Review Related to Key Variables and Concepts

Dinsmore, P. & Cabanis-Brewin, J. (2011) [4] explains that, the construction project management is the work of planning, execution and control of the construction process, from its inception to completion, reaching the final goal within a certain period, at a cost and by mobilizing human resources and building materials. The Construction Sector, following the evolution of civilization, has become a factor of fundamental importance for the development and progress of the Company, including the improvement of living conditions. The increasing technical complexities of the Enterprises, its large volume, economic and / or material, the constant evolution of the conditions and processes of projects and construction, involving increasingly theoretical

and practical knowledge from those who have to manage mission design, perform or supervise the development of projects. Despite the fact that procedures for overseeing complex undertakings are enhancing, the difficulties confronted by directors likewise keep on growing. In accordance to Dinsmore, P. & Cabanis-Brewin, J. (2011) [4] new innovations are being produced to empower better or less expensive tasks, however these new advances begin dubious, generally as now surely understood innovations were additionally once untested. Moreover existing advances are routinely connected under new circumstances and conditions. In spite of the fact that administrators and architects pick up experience each time a given innovation is utilized, the circumstances and states of each new venture are frequently special. Supervisors and architects required in complex framework extends regularly neglect to incorporate adequate cushions for these vulnerabilities. This implies there is no place for deviation and the venture performs deficiently not just in specialized terms, additionally authoritatively, as a consequence of specific hassles.

2.4 Summary

It is highly essential for the engineers and builders to understand that construction projects are difficult and complex but not impossible to be managed. The literature presented explains that, if taken the project systematically and strategically, the construction objectives can be achieved effectively. A properly planned project can be conveniently managed, rather than considering it to be impossible. The construction sites of projects should include, various aspects to reduce the level of difficulty. These aspects are as follows;

- The internal logistics of material flows (receiving, storage, transport and use).
- The use of equipment that facilitate and speed up the transport of materials and personnel as well as the performance of services.
- Ease of access to the workplace.

Hajdu, M. (2000) [6] Distances and routes to be made, seeking to minimize potential interference and reduce downtimes drive, waits and stops, which do not add value to the process noted. An effective visual communication as effective signalling pathways of these items, somehow, needs to be designed not only in the preparation of the construction project, but throughout the traversal of completion of service in the field. Hence, it needs to be understood that, construction projects can be completed efficiently if understood, clearly. Engineers and architects should, not take construction projects as impossible, rather plan the strategies effectively in order to complete the project. The literature had been accumulated in order to make the reader analyse the management of construction projects, instead of leaving them based on various complexity level. Hence, it can be summarized that, construction projects are difficult to manage and required a lot of effort, but cannot be rated as impossible to be completed. Dinsmore, P. & Cabanis-Brewin, J. (2011) [4]

Chapter Three: Methodology

3.1 Research Methodology

In the research method, the problem is defined within a framework with theoretical concrete terms as precise as possible, with questions. They must be answered in the course of the investigation and is paid special attention to the definition of terms. In quantitative research, researcher tries to control outcome of data, through physical or statistical methods any significant influence strange the variables of interest for the study. On the other hand, in qualitative research method, each observation is a word, a phrase, a description or a code representing a category. The important thing is that it counts the nature of the individual data, and not of a data set. In recent years, the debate is oriented towards the study of a possible integration between the two methods. New observation techniques that look to experience of the subject in the world of everyday life, have relaunched the approach quality, highlighting the potential and better adherence to current events of our time. Qualitative techniques refer to research using preferably or exclusively qualitative information and whose analysis is aimed at achieving detailed descriptions of phenomena studied and, when applicable it is important to provide explanations in which the utilization of statistical techniques or interpretations or analysis meanings are involved. According to Yellamraju, 2011 [9] The qualitative technique applied to the development of research in this work was the group session through a guide developed in a group focal composed of the population studied in this work. Qualitative research through the group session is common feature referring to complex events that try to be described in its entirety, in their natural environment. This research dissertation would cover secondary qualitative research method i.e. literature review would be used to examine the stated research topic.

3.2 Sampling

Sampling trial is a form of convenience sampling in which the elements of the population selected based on the judgment of the investigator, who, using their judgment or experience, choose the items to be included in the sample because he believes are representative of the population of interest, or somehow appropriate. The sample size of this research dissertation would be 10 literature reviews that are completely focused on the stated topic.

3.3 Research Questions

- How can be construction projects managed?

3.4 Validation

According to the research analysis done by Yellamraju, 2011 [9] The legitimacy of the examination services are hard to decide. The most direct technique for measuring the legitimacy being allude to longer considerable will be use of right and powerful system. Qualitative research method epistemological issues, for instance, the consistent examination itself and what it needs to do with the relationship subjectivity/objectivity are set under talk. In reference to Levy, 2012 [7] Subject being significantly required in the era technique data, it is essential to see the subjectivity inalienable in this strategy as a component of speculation, create it and consider it. The elucidation of the

methodology, displaying others to our subjectivity and, in like manner, confronting it, it is required. Next to this, Hardin, B. (2009) [7] explains that a quantitative philosophy takes a look at the individual general, in association. Furthermore, quantitative technique offer through and through examination of human inclusion in individual, family and social setting, in a way that can't be procured with sizes of estimation and multivariate models.

3.5 Data Collection Procedure

Use primary data means, however, collect them in person: this is possible in different ways, for example by observing and taking organized notes, recording interviews or measuring activities and behaviours, such as through a questionnaire. The information that can pick is endless, so it is important to choose carefully. The analyst looks at the main methods for gathering primary data. Each group will have to choose, then, who or what use to support their research. On the other hand, in secondary data collection, data is already collected by other people, organizations or governments, as in the case of various types of documents, diaries, official statistics and other research. Hardin, B. (2009) [7] This research dissertation would cover secondary qualitative research method i.e. literature review would be sued to examine the stated research topic.

Chapter Four: Result & Analysis

4.1 Outcomes

With respect to real framework ventures, IMEC Study fifteen led an appraisal around 60 ventures the world over, recognizing the dangers to which they were uncovered these tasks. The outcome demonstrated that the same dangers related markets and financial variables ruled the rundown of dangers every task debilitated 41.7%, trailed by the specialized dangers or consummation in 37.8% and the lawful and political dangers (institutional) in 20.5%. Alzahrani, 2013 [1] These information we obviously show that introduction to hazard is a component regular to by far most of foundation tasks, subsequently the significance of the issue for the development business and for the distinctive performing artists specifically and by implication required in the organizing of such ventures. Dangers can be recognized and depicted at different levels, and there might be a distinction impressively between various undertakings or associations. Some anticipates distinguished just little number of high - level dangers while others have hundreds or even a huge number of detailed dangers. Funding of projects can be done in various ways. Generally, funding is to through the financial system plays an important role in structuring and implementing this type of project. In general banks finance projects, either individually or together through the so - called syndicated loans. We also find sources of funding through the public market by the issuance and placement of bonds and other debt securities, which are purchased in the market by private investors. According to the above, we can define credit risk as the possibility that the project sponsor and the project itself not have the capacity to obtain resources necessary for funding Hajdu, M. (2000) [6] This risk is presented simply by belief, by part of financial institutions and private investors that the project will not will generate the resources necessary to settle the liabilities arising during implementation. It is being

measured, by the risk of non-payment to contrast with other risks. The utility in the risk rating is serving as an input to decision - making processes. According to Clough, R. (2003) [3] for the investor, it provides a simple and objective indicator credit risk assessment and low - cost complements the analysis itself, allowing determine the prize risk to require an investment. In reference of Yellamraju, 2011 [9] To determine this risk, financial institutions and private investors carefully analyse the sources of income of project resources, the market for the good or service will sell or lend the project and the guarantees offered by the project promoter. When these elements are carefully analysed and do not shed positive results it is clear that both financial institutions and investors private will be reluctant to place their resources, generating uncertainty about the project financing. Typically, the end result of an infrastructure project will be a structure, facility or other installation with the ability to produce a good or provide a service to a community or economic and social group. Thus, projects whose primary object the construction of a hydroelectric power, energy or electricity is good or product intends to distribute, construction projects aqueduct whose main object supply the water needs of a particular region, so that water will be good or resource to distribute in those cases. It is being measured, by the risk of non-payment to contrast with other risks. According to Clough, R. (2003) [3] the utility in the risk rating is serving as an input to decision - making processes. For the investor, it provides a simple and objective indicator credit risk assessment and low - cost complements the analysis itself, allowing determine the prize risk to require an investment. The same applies to coal or oil projects in where the mined ore will be good to sell. The problem Funding is not yet resolved, only in March 2007 (more than one year after the start of construction) will discuss how to fix the deficit facing the project estimated at 2.3 trillion pesos as final designs held by the Senate and the investment plan presented by the Government. According to Levy 2012 [8] In cases of representative instruments debt risk rating refers to the probability that the issuing company may cancel timely under the same agreed conditions (terms, interest rate, receipts, etc.).

Chapter Five: Conclusion

Activity carried out by a financial intermediary that may include diagnostics business, organization of potential buyers, investors' advice on the creation of new businesses and even obtaining resources for such operations. While the problem of identification and quantification of certain risks, it corresponds more to the world of engineering and economy that the world of law, is relevant note that there are different means or ways to address this problem. In general, identification techniques and risk analysis can be grouped into two categories. The first is a subjective evaluation or professional judgment by the people involved in the process or project. That is the most widely adopted in the real world position. The second is an objective position where theory and mathematical methods of evaluation are used to analyse the potential risks that may materialize in a given draft. The choice of one of these two systems varies depending on the size project, the information available, costs, availability of time and experience responsible for conducting the respective valuation. The subjective

evaluation or professional judgment is the most efficient and practical in construction projects and obviously requires experience and careful assessment and detailed. The classifications referred to above, correspond somehow what international practice has been observed in the field. These ratings help us determine clearly a set of risks that are natural to every project, that is, that we can find in all projects construction being carried out at present. Once identified risks materializing them will be the focus of Study of the parties in the project. The materialization may differ depending on the nature and size of each project, as well as the agents or participants in it. For example, in construction projects where the decision on hiring a specific builder is based on a purely economic criteria, risks they associated with acts of man will increase considerably in relation to those projects where economic factors are just a few of the major factors for decision making. So that the experience of the parties involved always have an important role when identifying and analysing potential risks they can affect the entire construction project.

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