

# Analyze Significant Factors Causing Delay of Construction Project Management

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**Abstract**— The objective of this research is to review the project management of construction projects in India. Construction sector is taken into account as an important sector in today's economy, thanks to the event in construction which is happening within the world generally and therefore the India. The development sector features a great importance not only to the economic and social life, but also to the requirements and inspiration of the local culture. This study stressed on many aspects on the topic of project management in terms of problems and impediments, and suggested solutions through this research, so as to motivate and develop the management of the projects. The researcher used mainly qualitative method and partly quantitative methods to finish the research add the study.

**Keywords:** Construction Project, Project Management, Factors, Construction Industry, Questionnaire, Cronbach's Alpha

## I. INTRODUCTION

The construction industry is that the largest industry within the world. It's more of a service than a producing industry. Growth during this industry actually is an indicator of the economic conditions of a rustic. This is often because the development industry consumes a good employment circle of labor. While the manufacturing industry exhibit high-quality products, timelines of service delivery, reasonable cost of service, and low failure rates, the development industry, on the opposite hand, is usually the other generally, the development industry is tougher than other industries due to: its unique nature; every project is one-of-a-kind; many conflicting parties are involved; projects are constrained by time, money and quality; and high risk.

A project is defined, whether it is in construction or not, by the following characteristics:

- A defined goal or objective.
- Specific tasks to be performed.
- A defined beginning and end.
- Resources being consumed

### A. Aims and Objectives of the Research

- To initiate a useful framework with a knowledge based that will help project managers lead their companies to be successful and make a difference in a highly competitive environment.

### B. The Objectives of the Research are

- To examine the Indian construction industry and define the nature and performance of management in the industry, and its contribution to the overall economy and social life.

- To highlight the needs and identify the problems and the barriers that currently exists in construction projects in the India.
- To use the results of this study to assist the public and private sectors in applying project management to improve the quality of their work and avoid problems.
- To highlight the success factors in managing projects, especially in the India, and try to improve it by using a system that organizes work in construction industry.

## II. LITERATURE REVIEW

### A. David Moore et.al (2011)

Management of Global Construction Projects is the first textbook of its kind, taking a uniquely global approach to project management in construction. Using a wealth of case studies from around the world to explain theory and practice, the authors take a business-oriented, decision-making approach to project management and the challenges it faces in the modern world.

### B. Nour, & Beucke (2012)

Said that environmental factors have the greatest influence on project management. These include social, political, and technical factors including funding, site, and location management to which industrial management added.

### C. Eckbald & Ashcraft (2013)

In their analysis of several building projects in the United States and in India, identified setting of clear project goals and open channels of communication as critical success factors. Hewage and Ruwanpura (2009) singled out project scope as determining project duration and hence impacting project success.

### D. Mohammadreza Yadollahi (2014)

The role of a PM will drive the success of the projects implementation. Therefore, the capability of an architect as a PM (ArPM) is critical in reducing challenges encountered. Accordingly, the identification of these challenges is an important task in selecting an appropriate ArPM. The aim of this study is to identify the most critical challenges faced by an ArPM for construction projects.

### E. Abdussalam Shibani, Denish Sukumar (2015)

In India, the construction industry plays an important role in the economy of the country. It employs a sizeable portion of the work force, contributes largely to the gross domestic product (GDP) of the country, and is seen as a key catalyst for the growth and development of the Indian economy. The industry, however, is beset with many challenges, including delivering projects within projected costs and delivery dates and at the right quality to increasingly discerning clients. It is because of this that project management has assumed so

much importance with the project manager seen to be a critical resource in the project achieving its objectives.

*F. Faiq Mohammed Sarhan Al-Zwainya, et .al (2016)*

The main aim of this research is to introduce Project management Methodology (PMM) and assessment the applying some of the types of the PMM in the construction sector. There are two types of project methodology approach, firstly traditional approach and modern approach. Modern project management methodology content two major methodologies are PMBOK and PRINCE2, Both PMBOK and PRINCE2 focused on project management processes and would appear near it on the methodology matrix.

*G. Ehab Soliman (2017)*

This paper studied the effect of communication problems that may lead to project delay. A questionnaire of predefined 19 communication problems was distributed to selected participants who are working in the Public Authority of Housing Welfare (PAHW) project sites in Kuwait. The PAHW is one of the largest governmental organizations in Kuwait, which is responsible for providing housing to Kuwaiti citizens. A questionnaire is distributed to two main groups: contractors and client supervision staff. Severity index was used to rank communication problems.

*H. Oluwaseun S. Dosumu et.al (2018)*

The aim of this study is to investigate the level of awareness of project managers of their roles on construction projects and determine the deficient project management roles that lead to abandonment of construction projects.

*I. Atul Auti (2019)*

The Indian construction industry is known to be inefficient and highly resistant to change. Even with a changing market and increasing competition, there are no obvious signs of commensurate changes in methods and approach. Project management, on the other hand, seems to offer what is needed in terms of tools and techniques to raise industry standards. Little is known of the extent to which project management as a discipline exists in India. The aim of this paper, therefore, is to investigate the current level of application of project management and the obstacles that have prevented its introduction in the Indian construction industry.

*J. Safw Kawa Abdulkareem (2020)*

The objective of this research paper is to highlight and analyze the different types of planning methods for construction projects in order to determine which one is the best method to use before starting projects, such as multi-story buildings, houses, roads, highways, airports, and so on. There are many strategies for scheduling construction projects; they include critical path method, Gantt chart, Work Breakdown Structure, time-scaled arrow diagram, line of balance chart, S-curve, activity on node diagram, resource allocation chart, and so on.

### III. METHODOLOGY

- Analyze roles and uses of the methodology and processes in managing projects.
- Design interview questions that will help the researcher in understanding the managing process in construction projects.
- Conduct a pilot study with people who are pioneers in project management field, and take feedback about the questions and their point of view
- Make the necessary changes in the questions according to the information taken from the pilot study.
- Gather data through semi-structured interviews.

A questionnaire survey was conducted by construction professionals representing various stakeholders involved in construction projects in India

#### A. Questionnaire Design

The questionnaire was designed supported critical factors were identified that contributed to the causes of risks. A questionnaire survey was developed to assess the perceptions of varied construction professionals of the relative importance of causes and therefore the effects of construction risks. The questionnaire was designed into two sections: Section A; section B. Section A is to get the requested background information about the respondents. Section B is to get information on the factors that contribute to the causes of risks in construction projects from the attitude of construction professionals. A five point Likert scale (1 very low, 2 low, 3 moderate, 4 high, 5 very high) was adopted where respondents were asked to rank the importance and impact of a specific factor on risks in one among their selected projects. Descriptive statistical techniques, namely Relative Importance Index (RII) has been used to highlight the relative importance of critical factors as perceived by the respondents (Assaf et. al, 1995; Faridi and El-Sayegh, 2006; Iyer and Jha, 2005; kmaraswamy and Chan, 1998).

##### 1) Data Collection through Field Survey

Field survey is done to study the prevalent environment in the building construction industry. The objective of doing field survey is to obtain the opinion of field personnel with respect to various types of risks associated with building construction industry. For the survey, based on literature review a questionnaire is developed to obtain the opinion of respondent. The questionnaire is designed probability level of the risk occurrence and degree of impact or the level of loss if the risk occurs. Survey was carried out among the various project participants. For the purpose of survey, leading builders, real estate developers, project managers, contractors and senior engineers in various construction organizations both in government as well as private sector were approached.

##### 2) Factors Rating

Likert scale of 1-5 was used in the questionnaire. A Likert scale is a kind of psychometric response scale often used in questionnaire and is the most widely used scale in survey research. When responding to a Likert questionnaire item, respondent specify their level of agreement to a statement. The scale is named after Rensis Likert. Who published a report describing its use (Likert, 1932). Likert scale is a

widely use instrument in measuring opinions, beliefs and attitudes (Davellis, 1991). The respondents were requested to judge the significance or expected loss of each risk. There are many criteria that respondents may need to consider. One alternative approach adopted by previous researchers is to consider two attributes for each risk: the probability level of risk occurrence denoted by a, and the degree of impact or the level of loss if the risk occurs, denoted by b. The same type of approach is followed in this study. Therefore risk significance denoted as RS, can be described as the function of the two attributes  $RS = f(a, b)$ . Applying this approach, the respondents were asked to respond to the two attributes for each risk. Considering a, the respondents were required to judge the probability level of risk occurrence by selecting one from among five levels namely, very small, small, normal, large and very large. Considering b, the respondents were required to judge the degree of impact if the risk concerned occurs, by selecting one from among five grades, very low, low, medium, high and very high.

**B. Data Analysis**

**1) Relative Importance Index (RII)**

Assess the relative significance among risks, previous literature work study suggests establishing a risk significance index by calculating a significance score for each risk. For Calculating the significance score, multiply the probability of occurrence by the degree of Impact. The significance score for each risk assessed by each respondent can be obtained through the model

$$S_j^i = A_j^i * B_j^i$$

Where  $S_j^i$  = Significance score assessed by respondent j for risk i

$A_j^i$  = Occurrence of risk i, assessed by respondent j

$B_j^i$  = degree of impact of risk I, assessed by respondent j.

By averaging scores from every one of the reactions, it is conceivable to get a normal importance score for each hazard, and this normal score is known as the hazard record score and is utilized for positioning the risks. The model for the figuring of hazard list score can be characterized as

$$R_s^i = \sum_j T = 1 S_j^i / T$$

Where  $R_s^i$  = index score for risk i

$S_j^i$  = Significance score assessed by respondent j for risk i

T = total number of responses

After obtaining index score for each risk factor, standard deviation and coefficient of variation of each risk factor is also determined. Subsequently, ranking of risk factors is done based on Index score.

**IV. APPLICABILITY OF TEST RESULTS TO CONSTRUCTION INDUSTRY**

In order to ensure the applicability of test results i.e. significant delay identified, to building construction projects Cronbach's Alpha test is applied due to the small data size.

: The cronbach's equation is

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^k \sigma y^2}{\sigma x^2} \right)$$

Where,

$\sigma x^2$  Is the variance of the observed total test scores = 0

$\sigma y^2$  the variance of component for the current sample of persons = 0

k = no of sample

S. NO.	Factors / Attributes	Frequency of Occurrence (a)	Severity of Effect (b)
A	Accurate Project Planning & Monitoring		
1	Planning and scheduling deficiencies	0.8	1
2	Methods/techniques of construction	1	1
3	Complexity of design and construction	0.6	0.6
4	Contractors deficiencies in planning and scheduling at tender stage	0.8	0.8
5	Effective monitoring and feedback process	0.8	0.8
6	Poor subcontractor performance	0.2	0.2
7	Improper planning	0.2	0.2
B	Design Efficiency		
1	Extent of completion of precontract design	0.8	0.6
2	Mistakes and discrepancies in construction documentations	0.2	0.2
3	Client-initiated variations	0.6	0.6
4	Design change within development period	0.6	0.6
5	On site prefabrication	0.6	0.6
C	Effective Site Management		
1	Improper control over site resource allocations	0.6	0.4
2	Escalation of material prices	0.6	0.6
3	Cash flow during construction	0.6	0.6
4	Lower labour productivity	0.6	0.6
5	Delays in work approval waiting for information	0.2	0.2
D	Communication		
1	Lack of communication between client and contractor	0.2	0.2
2	Poor site management and supervision	0.2	0.2
3	Poor contract management	0.2	0.2
4	Lack of communication between design team and client in design phase	0.4	0.2

E	Contractors Efficiency															
1	Inadequate contractors experience														0.2	0.4
2	Low speed at decision-making ,involving all project team														0.8	0.8
3	Project team experience in development stage														0.4	0.4
4	Deficiencies in cost estimates period														0.4	0.4
5	Contractors financial difficulties														0.2	0.2
F	Project Characteristics															
1	Scale and scope of project.														0.8	0.6
2	Type of structure														0.8	0.6
3	Location of Project														1	0.8
4	Project team experience in development stages														0.8	1
5	Deficiencies in cost estimates prepared														0.4	0.4
6	Contractors financial difficulties														0.2	0.2
G	Due Diligence															
1	Understanding responsibilities by all teams														0.8	0.8
2	Labor and management relation														0.8	1
3	Non adherence to contract conditions														0.4	0.4
H	Market Competition															
1	Tender period and market condition														0.8	1
2	Poor procurement programming of materials														0.2	0.2
3	Lead times for delivery of materials														0.4	0.4
4	Delay in subcontractors work														0.4	0.4

Table 1: Questionnaire

- After that mean of numerical values of all fourteen responses is determined.
- Then, Standard deviation and coefficient of variation for each risk factor is determined.
- Afterwards, Index Score for each risk is calculated by using RI Method.
- Above calculation is shown in table 2.

S. N O.	INTERVIEW NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total	MEAN(m)	S D(s)	C.O.V =(s/m)
A	Accurate Project Planning & Monitoring																		
1	Planning and scheduling deficiencies	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	11.04	0.789	0.113	0.143
2	Methods/techniques of construction	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	13.8	0.986	0.141	0.143
3	Complexity of design and construction	0.36	0.64	0.36	0.48	0.36	0.66	0.36	0.46	0.36	0.23	1	1	1	1	8.52	0.609	0.453	0.744
4	Contractors deficiencies in planning and scheduling at tender stage	0.64	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	5.44	0.389	0.113	0.291
5	Effective monitoring and feedback process	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	8.24	0.589	0.283	0.481
6	Poor subcontractor performance	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.6	0.043	0.028	0.660
7	Improper planning	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.6	0.043	0.028	0.660
B	Design Efficiency																		
1	Extent of completion of pre contract design	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	6.6	0.471	0.085	0.180
2	Mistakes and discrepancies	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	1.	0.083	0.	0.341

	in construction documentations	0 4	0 8	0 4	0 8	0 8	0 8	2 8	0 8	0 8	0 8	0 8	0 8	0 8	16		02 8	
3	Client-initiated variations	0. 3 6	0. 3 6	0. 3 6	0. 2 4	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 4	0. 3 6	4. 92	0.351	0. 08 5	0.241
4	Design change within development period	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 4	4. 92	0.351	0. 08 5	0.241
5	On site prefabrication	0. 3 6	0. 2 4	0. 3 6	0. 3 6	0. 4 8	0. 3 6	0. 4 8	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 4	4. 6	0.329	0. 08 5	0.258
C	Effective Site Management																	
1	Improper control over site resource allocations	0. 2 4	0. 2 4	0. 2 4	0. 2 4	0. 2 4	0. 2 4	0. 2 4	0. 2 4	0. 0 6	0. 2 4	0. 2 4	0. 2 4	0. 0 6	4. 44	0.317	0. 25 5	0.803
2	Escalation of material prices	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 6	0. 3 6	0. 2 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 4	4. 68	0.334	0. 08 5	0.254
3	Cash flow during construction	0. 3 6	0. 3 6	0. 2 4	0. 3 6	0. 2 4	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 2 4	4. 68	0.334	0. 08 5	0.254
4	Lower labour productivity	0. 3 6	0. 3 6	0. 1 2	0. 1 2	0. 1 2	0. 1 2	0. 1 2	0. 3 6	0. 3 6	0. 3 6	0. 3 6	0. 1 2	0. 3 6	3. 48	0.249	0. 08 5	0.341
5	Delays in work approval waiting for information	0. 0 4	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 2	0. 0 8	0. 0 8	0. 0 8	0. 0 8	1. 24	0.089	0. 02 8	0.319
D	Communication																	
1	Lack of communication between client and contractor	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 1	0. 68	0.049	0. 08 5	1.747
2	Poor site management and supervision	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 1	0. 68	0.049	0. 08 5	1.747
3	Poor contract management	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 1	0. 68	0.049	0. 08 5	1.747
4	Lack of communication between design team and client in design phase	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 4	1. 08	0.077	0. 02 8	0.367
E	Contractors Efficiency																	
1	Inadequate contractors experience	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 8	0. 0 2	1. 28	0.091	0. 11 3	1.237
2	Low speed at decision-making, involving all project team	0. 6 4	0. 1 6	0. 2 4	0. 1 6	0. 1 6	0. 3 2	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	2. 96	0.211	0. 33 9	1.605
3	Project team experience in development stage	0. 1 6	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	0. 6 4	8. 48	0.606	0. 33 9	0.560
4	Deficiencies in cost estimates period	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 1 6	0. 2 4	2. 32	0.166	0. 05 7	0.341
5	Contractors financial difficulties	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 4	0. 0 1	0. 68	0.049	0. 08 5	1.747
F	Project Characteristics																	
1	Scale and scope of project.	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 3 6	6. 6	0.471	0. 08 5	0.180
2	Type of structure	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 4 8	0. 3 6	6. 6	0.471	0. 08 5	0.180
3	Location of Project	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 8	0. 2 4	10. 64	0.760	0. 39 6	0.521

4	Project team experience in development stages	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	10.64	0.760	0.396	0.521
5	Deficiencies in cost estimates prepared	0.16	0.16	0.08	0.16	0.16	0.16	0.16	0.16	0.08	0.32	0.32	0.02	0.32	0.32	3.48	0.249	0.113	0.455
6	Contractors financial difficulties	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.84	0.060	0.085	1.414
G	Due Diligence																		
1	Understanding responsibilities by all teams	0.64	0.04	0.08	0.08	0.08	0.08	0.08	1.08	0.1	1.1	1.1	1.1	1.1	1.1	11.48	0.820	0.255	0.310
2	Labor and management relation	0.8	0.8	0.8	0.8	0.8	0.8	0.64	0.8	0.8	0.8	0.8	0.8	0.8	0.24	10.48	0.749	0.396	0.529
3	Nonadherence to contract conditions	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.4	0.16	0.16	0.16	0.16	0.24	2.56	0.183	0.057	0.309
H	Market Competition																		
1	Tender period and market condition	0.8	0.04	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	9.24	0.660	0.424	0.643
2	Poor procurement programming of materials	0.04	0.16	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.16	0.84	0.060	0.085	1.414
3	Lead times for delivery of materials	0.16	0.04	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.24	2.12	0.151	0.057	0.374
4	Delay in subcontractors work	0.16	0.16	0.16	0.16	0.16	0.16	0.32	0.16	0.16	0.16	0.16	0.16	0.16	0.32	2.6	0.186	0.141	0.761

Table 2: Results

S. No	Factors / Attributes	Index Score	Rank order
1	Methods/Techniques of construction	0.986	1
2	Understanding responsibilities by all teams	0.82	2
3	Planning and scheduling deficiencies	0.789	3
4	Location of Project	0.76	4
5	Project team experience in development stages	0.76	4
6	Labour and management relation	0.749	5
7	Complexity of design and construction	0.609	6
8	Tender period and market condition	0.66	7
9	Project team experience in development stage	0.606	8
10	Effective monitoring and feedback process	0.589	9
11	Extent of completion of pre contract design	0.471	10
12	Scale and scope of project.	0.471	10
13	Type of structure	0.471	11
14	Contractors deficiencies in planning and scheduling at tender stage	0.389	12
15	Client-initiated variations	0.351	13
16	Design change within development period	0.351	13
17	Escalation of material prices	0.334	14
18	Cash flow during construction	0.334	14
19	On site prefabrication	0.329	15
20	Improper control over site resource allocations	0.317	16
21	Deficiencies in cost estimates prepared	0.249	17
22	Lower labour productivity	0.249	17
23	Low speed at decision-making, involving all project team	0.211	18
24	Delay in subcontractors work	0.186	19
25	Non adherence to contract conditions	0.183	20
26	Deficiencies in cost estimates period	0.166	21
27	Lead times for delivery of materials	0.151	22
28	Inadequate contractors experience	0.091	23

29	Delays in work approval waiting for information	0.089	24
30	Mistakes and discrepancies in construction documentations	0.083	25
31	Lack of communication between design team and client in design phase	0.077	26
32	Contractors financial difficulties	0.06	27
33	Poor procurement programming of materials	0.06	27
34	Lack of communication between client and contractor	0.049	28
35	Poor site management and supervision	0.049	28
36	Poor contract management	0.049	28
37	Contractors financial difficulties	0.049	28
38	Poor subcontractor performance	0.043	29
39	Improper planning	0.043	29

Table 3:

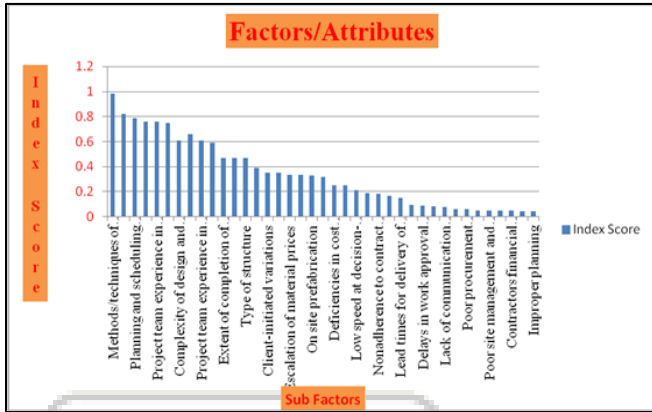


Fig. 1:

## V. CONCLUSION

In this study, the foremost point which was considered this research is to explore the key risk factors and identify these factors that might be faced in construction projects in India.

This research only is introduction to project management design framework, this framework may be a tool to guide project managers in managing construction projects, and it doesn't give solutions or best approaches of project management.

Modernization and electronic age is here to remain, and old ideas must divulge to the new, presenting further challenges and further successions or failures, counting on how the longer term will shape life, and the way life will go along side modernization.

In the literature review, the most keys to project management is Methods/Techniques of construction, Understanding responsibilities by all teams and Planning and scheduling deficiencies, but still all the component added within the framework are considered important to ensure the project success, which are create, process and response.

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