

Success and Failure Factors of Indian Construction Companies.

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ABSTRACT

Company success and failure is not only extremely disruptive to an industry but may also cause significant rippling effects in an economy. Construction companies are vulnerable to bankruptcy due to the fragmented nature of the industry, high competition, the high uncertainty and risk involved, and considerable fluctuations in construction volume. It is important to recognize any potential company success and failures at the earliest opportunity. Previous research work by authors consisted of conducting survey among 7 construction companies in which cash flow management was identified as important factor. Previous research work was taken further to investigate into detail. Within this context, a survey was carried amongst 30 Indian construction companies which are divided into three categories – large, medium and small. Point rating technique is used to determine the factors.

KEYWORDS - Construction company, Entrepreneurship, Failure factors, Indian construction ,Success factors.

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I. INTRODUCTION

The construction business is large in size and significant in the role it plays in the economy but throughout recent years it has witnessed an increasing number of construction financial failures. A number of studies have been conducted to address and control the industry's problems in the developing countries. However, lack of progress was noted in solving such problems due to many reasons. These reasons as outlined by Ofori (1994) include: in-appropriateness of some of the recommendations and the initiatives adopted poor executive capacity of the implementing agencies, lack of resources for implementation and initiatives, neglect of the construction industry by governments and their lack of commitment to solve its problems, and absence of measurable targets in programmes for improving the industry's overall performance. The Indian construction industry has been a vital contributor to the Indian economy. It represented 26% of the gross domestic production (GDP) in 2000 . It plays an important role in building up the Indian national economy in terms of absorption high number of labors and affecting various economic, social, educational, and vocational sectors. Since then, this sector has been subjected to many challenges which have decreased its role in improving the Indian economy in contrast with its counterparts in many developing and neighboring countries. The aim of this paper is to explore the causes of contractor/developer business success and failure and to investigate the impact level of these causes from the contractor/developers viewpoint.

Previous research work by authors consisted of survey carried out among 7 Indian construction companies which are located in the Aurangabad district of Maharashtra region of India. In the survey, top-level managers and owners of the companies were interviewed. The interviews took place over a three month period between August and October 2013. Finally, the ranking of the critical success factors was determined by using the Point Rating Technique. Based on the results, Cash flow management characteristics was determined as the most important factor to company success.

Within this context the previous research work have been taken further to investigate the topic in detail. A survey was carried out among 30 Indian construction companies which are located in the Aurangabad district of Maharashtra region of India. The companies were divided into 3 categories – large, medium and small size firms. The companies were categorized to identify the failure and success factors individually amongst large, medium and small size firms. In this survey, top-level managers and owners of the companies were interviewed. The ranking of the critical success factors has been determined by using the Point Rating Technique.

II. SURVEY

The aim of this research is to find out the success and failure factors leading to construction company success. The survey was carried out among 30 Indian construction companies which are located in the Aurangabad district of Maharashtra region of India. The companies were divided into 3 categories – large, medium and small size firms. The companies were categorized to identify the failure and success factors individually amongst large, medium and small size firms Construction firms registered with the Confederation of Real Estate Developers’ Associations of India (CREDAI) at this region were considered in the study. All of these firms are operating in building and housing sectors. In this survey, semi-structured interviews were carried out among top-level managers and owners of the companies. Top-level managers and owners were selected for the interviews because they are assumed to have enough knowledge about the organizational structure, culture and strategies. The 30 interviews took place over a 7 month period between August 2013 and March 2014 and each lasted approximately 1 hr. The survey questionnaire was administered during face-to-face interviews and it consisted of 23 questions including both closed and open-ended questions. It is divided into two main sections. Section I covered general information about the companies. Section II dealt with factors leading to company success.

Although survey results reflect the opinions of experts from 30 firms, it is believed that they can give an idea about the critical success and failure factors leading to company success in the Indian construction industry. Point Rating Scale method is used to determine the ranking of the critical success factors. The decision maker is asked to rate each of the attributes out of 10.. The factors considered in the study were identified based on a literature review. A total of possible factors that were felt to have an effect on the construction business success of companies in India were determined. The quantification of factors was done after the discussion with industry experts. For accurate ratings it is important to quantify the factors. The factors were rated according to their importance and an average ranking of factors was calculated according to the responses.

III. QUANTIFICATION OF FACTORS

Table 1 : Quantification of Factors

Factors	Quantification	
1. Budgetary (For a project of 50 crores)	Rating	
• Insufficient profit	0	< 50% of project cost.
	1-3	< 25% of project cost
	4-6	< 12% of project cost
	7-9	< 6% of project cost
	10	< 2% of project cost
• Heavy operating expenses	0	≥ 10% of project cost
	1-3	≥ 15% of project cost
	4-6	≥ 30% of project cost
	7-9	≥ 40% of project cost
	10	≥ 50% of project cost
• Insufficient capital (Inadequacy of working capital)	0	≥ 125% of project cost
	1-3	≥ 100% of project cost
	4-6	≥ 75% of project cost
	7-9	≥ 50% of project cost
	10	≥ 25% of project cost
• Fluctuation in material cost	0	No increase in material cost
	1-3	≤ 15% of project cost
	4-6	≤ 20% of project cost
	7-9	≤ 25% of project cost
	10	>25% of project cost
• Cashflow management	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project

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• Estimating practices	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
2. Managerial		
• Lack of business knowledge	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Lack of managerial experience	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Lack of experience in line of work	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Use of project management techniques	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Use of documentation system	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Owner involvement in construction phase	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Organization structure	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
3. Macro-economic		
• General economic conditions	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Industry weakness	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project

• Bank policy	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Government policy	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
4. Others		
• Lack of early warning measures	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• High employee turnover	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Poor accounting system	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Inadequate sales	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Over expansion	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project
• Obtaining work in new region	0	Least influential on project
	1-3	Makes a small effect on project
	4-6	Makes a average effect on project
	7-9	Makes a significant effect on project
	10	Highly influential on project

IV. SURVEY RESULTS

The respondents were asked to evaluate the importance level of the factors. Table below shows the ranking of the factors according to their importance as perceived by the respondents. Cash flow management was considered as the most important factor among large size firms. Insufficient capital was considered as the most important factor among medium size firms. Inadequate sales was considered as the most important factor among small size firms. Although the majority of the respondents considered the advanced project management techniques as important tools, it was not seen as a highly essential parameter for company success. The following are the ranking and average rating of the factors that were calculated after obtaining the data from 30 construction companies.

Table 2: Ranking and Average Rating of Factors for Large Size firms.

Ranking	Factors	Scale Rating	
1	Cashflow management	10	9.1
2	Poor accounting system	10	8.4
3	Industry weakness	10	8.3
3	Insufficient capital	10	8.3
4	Estimating practices	10	8.2
4	Lack of managerial experience	10	8.2
5	Fluctuation in material cost	10	8.1
6	Use of project management techniques	10	7.8
6	Inadequate sales	10	7.8
7	Use of documentation system	10	7.7
8	Over expansion	10	7.5
9	High employee turnover	10	7.3
10	Heavy operating expenses	10	7.1
10	Government policy	10	7.1
11	Lack of business knowledge	10	7.0
12	General economic conditions	10	6.8
12	Insufficient profit	10	6.8
12	Bank policy	10	6.8
12	Organization structure	10	6.8
13	Lack of early warning measures	10	6.7
14	Lack of experience in line of work	10	6.6
15	Obtaining work in new region	10	6.5
16	Owner involvement in construction phase	10	5.0

Table 3 : Ranking and Average Rating of Factors for Medium Size firms.

Ranking	Factors	Scale Rating	
1	Insufficient capital	10	9.0
2	Lack of managerial experience	10	8.8
3	General economic conditions	10	8.5
4	Obtaining work in new region	10	8.4
5	Insufficient profit	10	8.0
5	Cashflow management	10	8.0
6	Inadequate sales	10	7.8
7	Fluctuation in material cost	10	7.6
8	Over expansion	10	7.5
8	Industry weakness	10	7.5
9	Estimating practices	10	7.2
10	Use of project management techniques	10	6.9
11	Use of documentation system	10	6.8
11	High employee turnover	10	6.8
11	Poor accounting system	10	6.8
12	Government policy	10	6.5
13	Organization structure	10	6.1
14	Bank policy	10	5.6
15	Lack of early warning measures	10	5.1
16	Lack of business knowledge	10	4.5
17	Owner involvement in construction phase	10	4.0
18	Lack of experience in line of work	10	3.5
19	Heavy operating expenses	10	3.0

Table 4 : Ranking and Average Rating of Factors for Small Size firms.

Ranking	Factors	Scale Rating	
1	Inadequate sales	10	9.3
2	High employee turnover	10	9.1
3	Owner involvement in construction phase	10	8.8
4	Insufficient capital	10	8.5
4	Cashflow management	10	8.5
5	Insufficient profit	10	8.1
6	Lack of business knowledge	10	7.9
7	Over expansion	10	7.8
8	Obtaining work in new region	10	7.6
9	Use of documentation system	10	7.3
10	General economic conditions	10	7.0
11	Poor accounting system	10	6.5
12	Industry weakness	10	6.3
13	Fluctuation in material cost	10	6.0
13	Government policy	10	6.0
14	Lack of managerial experience	10	5.9
15	Organization structure	10	5.6
16	Estimating practices	10	5.5
16	Lack of early warning measures	10	5.5
17	Bank policy	10	5.2
18	Use of project management techniques	10	4.6
19	Lack of experience in line of work	10	4.1
20	Heavy operating expenses	10	2.1

Table 5 : Ranking and Average Rating of Factors for All Size firms.

Ranking	Factors	Scale Rating	
1	Insufficient capital	10	8.6
2	Cashflow management	10	8.53
3	Inadequate sales	10	8.3
4	High employee turnover	10	7.73
5	Insufficient profit	10	7.63
5	Lack of managerial experience	10	7.63
6	Over expansion	10	7.6
7	Obtaining work in new region	10	7.5
8	General economic conditions	10	7.4
9	Industry weakness	10	7.36
10	Use of documentation system	10	7.26
11	Fluctuation in material cost	10	7.23
11	Poor accounting system	10	7.23
12	Estimating practices	10	6.96
13	Government policy	10	6.53
14	Lack of business knowledge	10	6.46
15	Use of project management techniques	10	6.43
16	Organization structure	10	6.16
17	Owner involvement in construction phase	10	5.93
18	Bank policy	10	5.86
19	Lack of early warning measures	10	5.76
20	Lack of experience in line of work	10	4.73
21	Heavy operating expenses	10	4.06

V. CONCLUSION

This study presented the survey carried out among Indian construction companies. The critical factors leading to construction company success have been investigated through interviews among top-level managers and owners of the companies. According to the results cash flow management characteristic with rating 9.1 was identified as the most important main factors to success among large size firm, as per table 2. Insufficient capital with rating 9.0 and 8.6 was considered as the most important factor among medium size and all size firms, as per table 3 and table 5. Inadequate sales with rating 9.3 was considered as the most important factor among small size firms, as per table 4. Organizing and planning was perceived to be the most important item contributing to company success when considering the importance of the factors. According to the literature review, this result might be expected since planning was addressed as one of the most important items of all the management practices. Moreover, it was interesting to note that managers/owners did not consider project management technique usage as a highly essential item for company success. The findings in the study should be interpreted with caution since the research was limited with only 30 firms.

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